Utilities and Transportation Commission Standard Inspection Report for Intrastate Gas Systems Procedures and Plan Review

 $S-Satisfactory \qquad U-Unsatisfactory \qquad N/A-Not\ Applicable \qquad N/C-Not\ Checked$ If an item is marked U, N/A, or N/C, an explanation must be included in this report.

A completed **Inspection Checklist**, **Cover Letter and Field Report** are to be submitted to the Chief Engineer within **30** days from completion of the inspection.

| | | Inspection | Report | | |
|-------------------------------|-------|-----------------------|-----------------|-------------------------|-------|
| Inspection ID/Docket N | umber | 6545 | | | |
| Inspector Name & Submit Date | | Dave Cullom 10/29/15 | | | |
| Sr. Eng Name & Review/Date | | Joe Subsits 11/4/2015 | | | |
| | | Operator Info | ormation | | |
| Name of Operator: | Puget | Sound Energy | | OP ID #: | 22189 |
| Name of Unit(s): | Head | quarters | | | |
| Records Location: | Belle | vue, Wa | | | |
| Date(s) of Last Review: | 2010 | | Inspection Date | October 15 and 29, 2015 | |

| Inspection | Summary: |
|------------|-----------------|
|------------|-----------------|

This inspection was a plan and procedure review conducted by Dave Cullom with Scott Anderson, and Derek Norwood assisting. No probable violations were found during this audit. Please see notes for item location in the gas operating, field, and welding manuals.

| HQ Address: | | | System/Unit Name & Address: | |
|-----------------------------|-------------------------|------------------|-----------------------------|--------------|
| PO Box 97034 M/S: EST | `-07W | | N/A – HQ Audit | |
| Bellevue, WA 98009-973 | 34 | | | |
| | | | | |
| Co. Official: | Booga K. Gilbertson, Sı | r. VP Operations | Phone No.: | N/A |
| Phone No.: | 425-462-3843 Office | | Fax No.: | N/A |
| Fax No.: | 425-456-2724 Fax | | Emergency Phone No.: | N/A |
| Emergency Phone No.: | 800-552-7171 | | | N/A |
| Persons Int | terviewed | | Title | Phone No. |
| Darryl | Hong | Sr. Reg | gulatory Compliance Analyst | 425-462-3911 |
| Derek | Koo | | Consulting Engineer | 425-462-3911 |
| Stephani | e Silva | Com | pliance Program Manager | 425-462-3923 |
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S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

| | GAS SYSTEM OPERATIONS | | | | | | | | | | |
|--------------------|--|--|---|--|--|--|--|--|--|--|--|
| Gas Sup | plier Williams | | | | | | | | | | |
| | Operating Pressure(s): | MAOP (Within last year) | Actual Operating Pressure (At time of Inspection) | | | | | | | | |
| Feeder: | North Seattle Supply Greenwood Supply South Seattle Supply Midway & Others –These are West King County Feeders | 250 MAOP 250 MAOP 250 MAOP 250 MAOP | This is an O&M audit. No field visit was performed. | | | | | | | | |
| Town: | | | | | | | | | | | |
| Other: | | | | | | | | | | | |
| Does the pipelines | | e will be addressed in another inspectio | n later this year. | | | | | | | | |

| Pipe Specifications: | | | | | | | | | | |
|------------------------|-----------------------------|------------------------------|--------------------------------|--|--|--|--|--|--|--|
| Year Installed (Range) | 1956-2015 | Pipe Diameters (Range) | .5-20 inch | | | | | | | |
| Material Type | STW, HDPE, MDPE, Aldyl HD | Line Pipe Specification Used | API5L and D2513 | | | | | | | |
| Mileage | 1852 (West King) See Annual | SMYS % | Variable - See Unit Audits for | | | | | | | |
| | Report for current mileage | | individual %SMYS | | | | | | | |

49 CFR PART 191 & CHAPTER 480-93 WAC

| | | REPORTING PROCEDURES | S | U | N/A | N/C |
|-----|----------------|--|---|---|-----|-----|
| 1. | | Immediate Notice of certain incidents to NRC (800) 424-8802, or electronically at http://www.nrc.uscg.mil/nrchp.html , and additional report if significant new information becomes available. Operator must have a written procedure for calculating an initial estimate of the amount of product released in an accident. (Amdt. 192-115, 75 FR 72878, November 26, 2010, eff. 1/1/2011)191.5 ***Notes – In GOS 2425.1100 4.2, for NRC reports. This is in the RPE document. We reviewed the RPE document*** | X | | | |
| 2. | 480-93-180 (1) | Reports (except SRCR and offshore pipeline condition reports) must be submitted electronically to PHMSA at http://portal.phmsa.dot.gov/pipeline unless an alternative reporting method is authorized IAW with paragraph (d) of this section. (Amdt. 191-115, 75 FR 72878, November 26, 2010, eff. 1/1/2011). 191.7 ***Notes - 2425.1100 Section 4.4 *** | X | | | |
| 3. | | Telephonic Reports to UTC Pipeline Safety Incident Notification 1-888-321-9144 (Within 2 hours) for events which; 480-93-200(1) | | | | |
| 4. | | (a) Results in a fatality or personal injury requiring hospitalization; ***Notes – In GOS 2425.1100 5.2.1**** | X | | | |
| 5. | | (b) Results in damage to the property of the operator and others of a combined total exceeding fifty thousand dollars;***Notes – In GOS 2425.1100 5.2.2**** | X | | | |
| 6. | | (c) Results in the evacuation of a building, or high occupancy structures or areas;***Notes – In GOS 2425.1100 5.2.3**** | X | | | |
| 7. | | (d) Results in the unintentional ignition of gas;***Notes – In GOS 2425.1100 5.2.4**** | X | | | |
| 8. | | (e) Results in the unscheduled interruption of service furnished by any operator to twenty-five or more distribution customers; ***Notes – In GOS 2425.1100 5.2.5**** | X | | | |
| 9. | | (f) Results in a pipeline or system pressure exceeding the MAOP plus ten percent or the maximum pressure allowed by proximity considerations outlined in WAC 480-93-020; ***Notes – In GOS 2425.1100 5.2.6**** | X | | | |
| 10. | | g) Is significant, in the judgment of the operator, even though it does not meet the criteria of (a) through (e) of this subsection; or***Notes – In GOS 2425.1100 5.2.8**** | X | | | |
| 11. | | Telephonic Reports to UTC Pipeline Safety Incident Notification 1-888-321-9146 (Within 24 hours) for; 480-93-200(2) ***Notes – In GOS 2425.1100 5.3**** | X | | | |

| | | REPORTING PROCEDURES | S | U | N/A | N/C |
|-----|----------------|---|---|---|-----|-----|
| 12. | | (a) The uncontrolled release of gas for more than two hours; ***Notes – In GOS 2425.1100 5.3.1**** | X | | | |
| 13. | | b) The taking of a high pressure supply or transmission pipeline or a major distribution supply pipeline out of service; ***Notes – In GOS 2425.1100 5.3.2**** | X | | | |
| 14. | | (c) A pipeline or system operating at low pressure dropping below the safe operating conditions of attached appliances and gas equipment; or ***Notes – In GOS 2425.1100 5.3.3**** | X | | | |
| 15. | 480-93-180 (1) | (d) A pipeline or system pressure exceeding the MAOP.***Notes – In GOS 2425.1100 5.3.4**** | X | | | |
| 16. | | 30 day written incident (federal) reports; (DOT Form F 7100.1) 191.9(a) For Transmission & Gathering Lines; (DOT Form F 7100.2) 191.15(a)30-day follow-up written report Submittal must be electronically to http://portal.phmsa.dot.gov/pipeline (Amdt. 192-115, 75 FR 72878, November 26, 2010, eff. 1/1/2011). ***Notes – In GOS 2425.1100 5.6**** | X | | | |
| 17. | | Supplemental incident reports 191.15(c)***Notes – In GOS 2425.1100 5.7**** | X | | | |
| 18. | | Written incident reports filed with the commission (within 30 days); and include the following; 480-93-200(4) (a) thru (g) ***Notes – In GOS 2425.1100 5.6**** | X | | | |
| 19. | 480-93-180 (1) | Supplemental reports filed with the commission 480-93-200(5) ***Notes – In GOS 2425.1100 5.7**** | X | | | |
| 20. | 480-93-180 (1) | Written report within 45 days of receiving the failure analysis of any incident or hazardous condition due to construction defects or material failure 480-93-200(6) ***Notes – In GOS 2575.1900 6**** | X | | | |
| 21. | | Annual Report (DOT Form PHMSA F-7100.2-1) For Transmission & Gathering 191.17(a) Complete and submit DOT Form PHMSA F 7100-2.1 by March 15 of each calendar year for the preceding year. (NOTE: June 15, 2013 for the year 2012). ***Notes – In GOS 2425.1100 6.0 and 7.0**** | х | | | |
| 22. | | Filing Reports of Damage to Gas Pipeline Facilities to the commission. (eff 4/1/2013) (Via the commission's Virtual DIRT system or on-line damage reporting form) 480-93-200(7) | | | | |
| 23. | | Does the operator report to the commission the requirements set forth in RCW 19.122.053(3) (a) through (n) 480-93-200(7)(a) ***Notes – In GOS 2425.1600 8 to 8.1.1.14**** | X | | | |
| 24. | | Does the operator report the name, address, and phone number of the person or entity that the company has reason to believe may have caused damage due to excavations conducted without facility locates first being completed? 480-93-200(7)(b) ***Notes – In GOS 2425.1600 8.1.2**** | X | | | |
| 25. | 480-93-180 (1) | Does the operator retain all damage and damage claim records it creates related to damage events reported under 93-200(7)(b), including photographs and documentation supporting the conclusion that a facilities locate was not completed? 480-93-200(7)(c) Note: Records maintained for two years and made available to the commission upon request. ***Notes – In GOS 2425.1600 8.1.3**** | X | | | |
| 26. | | Does the operator provide the following information to excavators who damage gas pipeline facilities? 480-93-200(8) | | | | |
| 27. | | Notification requirements for excavators under RCW 19.122.050(1) 200(8)(a) ***Notes – In GOS 2425.1600 8.2.1**** | X | | | |
| 28. | | A description of the excavator's responsibilities for reporting damages under RCW 19.122.053; and 200(8)(b) ***Notes – In GOS 2425.1600 8.2.2**** | X | | | |
| 29. | | Information concerning the safety committee referenced under RCW 19.122.130, including committee contact information, and the process for filing a complaint with the safety committee. 200(8)(c) ***Notes – In GOS 2425.1600 8.2.2**** | X | | | |
| 30. | | Reports to the commission only when the operator or its contractor observes or becomes aware of the following activities • An excavator digs within thirty-five feet of a transmission pipeline, as defined by RCW 19.122.020(26) without first obtaining a facilities locate; (200(9)(a) • A person intentionally damages or removes marks indicating the location or presence of gas pipeline facilities. 200(9)(b) ***Notes – In GOS 2425.1600 8.3.1**** | X | | | |

| | | REPORTING PROCEDURES | S | U | N/A | N/C |
|-----|----------------|---|---|---|-----|-----|
| | | Annual Reports <u>filed with the commission</u> no later than March 15 for the proceeding calendar year 480-93-200(10) ***Notes – No checklist entry available in UTC form**** | | | | |
| 31. | | A copy of PHMSA form F-7100.1-1 or F-7100.2-1 annual report required by the PHMSA/OPS 480-93-200(10)(a) ***Notes – In GOS 2425.1100 Section 6 and 7**** | X | | | |
| 32. | | Annual report on construction defects or material failures 480-93-200(10)(b) ***Notes – In GOS 2425.1100 11.2**** | X | | | |
| 33. | | Providing updated emergency contact information to the Commission and appropriate officials 480-93-200(11) *****GOS 2425.2300 Section 8.2*** | X | | | |
| 34. | 480-93-180 (1) | Providing daily construction and repair activities reports 480-93-200(12) ***Notes – In GOS 2425.1300 Section 4**** | X | | | |
| 35. | | Submitting copy of DOT Drug and Alcohol Testing MIS Data Collection Form (when required) 480-93-200(13) ***Notes – In GOS 2425.2000 Section 4**** | X | | | |
| 36. | | Each operator must obtain an OPID, validate its OPIDs, and notify PHMSA of certain events at http://portal.phmsa.dot.gov/pipeline 191.22 ***Notes – In GOS 2425.1100 Section 9.2.1**** | X | | | |
| 37. | | Safety related condition reports (SRCR) 191.23 ***Notes – In GOS 2425.1200**** | X | | | |
| | | Filing the SRCR within 5 days of determination, but not later than 10 days after discovery 191.25; 49 U.S.C. 60139, Subsection (b)(2) Note: Operators of gas transmission pipelines that if the pipeline pressure exceeds maximum allowable operating pressure (MAOP) plus the build-up, owner/operator must report the exceedance to PHMSA on or before the fifth day following the date on which the exceedance occurs. The name and principal address of the operator, date of the report, name, job title, and business telephone number of the person submitting the report. The name, job title, and business telephone number of the person who determined the condition exists. The date the condition was discovered and the date the condition was first determined to exist. The location of the condition, with reference to the town/city/county and state or offshore site, and as appropriate, nearest street address, offshore platform, survey station number, milepost, landmark, and the name of the commodity transported or stored. The corrective action taken before the report was submitted and the planned follow-up or future corrective action, including the anticipated schedule for starting and concluding such action. | X | | | |
| 39. | 192.605(d) | ***Notes – It is on Form 3346**** Does the process include instructions enabling personnel who perform operation and maintenance activities to recognize conditions that may potentially be safety-related conditions? ***Notes – In GOS 2425.1100 Table 4-1**** | X | | | |

| Requ | Required Submission of Data to the National Pipeline Mapping System Under the Pipeline Safety Improvement Act of 2002 | | | | | N/C |
|------|---|--|---|--|--|-----|
| | 49 U.S.C. 60132, Subsection (b) ADB-08-07 | Updates to NPMS: Operators are required to make update submissions every 12 months if any system modifications have occurred. Go to http://www.npms.phmsa.dot.gov/submission/ to review existing data on record. Also http://www.npms.phmsa.dot.gov/submission/ to review existing data on record. Also http://www.npms.phmsa.dot.gov/submission/ to review existing data on record. Also http://www.npms.phmsa.dot.gov/submission/ to review existing data on record. Also report no modifications if none have occurred since the last complete submission. Include operator contact information with all updates. ***Notes - In GOS 2425.1100 Section 8**** | X | | | |
| | RCW 81.88.080 | Pipeline Mapping System: Has the operator provided accurate maps (or updates) of pipelines, operating over two hundred fifty pounds per square inch gauge, to specifications developed by the commission sufficient to meet the needs of first responders? | X | | | |

| Comr | ments: | | | | | |
|------|----------------|---|---|---|-----|------|
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| | | 49 CFR PART 192 SUBPART A – GENERAL | S | U | N/A | N/C |
| 40. | | CHAPTER 480-93 WAC – GAS COMPANIESSAFETY Procedures for notifying new customers, within 90 days, of their responsibility for those | ~ | | - " | |
| 40. | | selections of service lines not maintained by the operator. §192.16 ***Notes – In GOS | X | | | |
| | 480-93-180 (1) | 2425.1900 Section 3.3**** | | | | |
| 41. | | Conversion to Service - Any pipelines previously used in service not subject to Part 192? 192.14 ***Notes - In GOS 2525.1100 Section 3.15 **** | X | | | |
| | | | | | • | |
| Comr | nents: | | | | | |
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| | | SUBPART B - MATERIALS | S | U | N/A | N/C |
| | | Are minimum requirements prescribed for the selection and qualification of pipe and | Б | | IVA | 14/6 |
| | | components for use in pipelines 192.51 | | | | |
| 42. | 400.02.100.(1) | For steel pipe, manufactured in accordance with and meet the listed specification found under | v | | | |
| | 480-93-180 (1) | Appendix B 192.55 ***Notes – These are in the standards department Purchase Spec 1480.0100*** | X | | | |
| | | For new plastic pipe, qualified for use under this part if: 192.59(a) | | | | |
| 43. | | It is manufactured in accordance with a listed specification; and 192.59(a)(1) | | | | |
| | 480-93-180 (1) | • It is resistant to chemicals with which contact may be anticipated. 192.59(a) (2) | X | | | |
| | | ***Notes – These are in the standards department Purchase Spec 1480.0100*** For used plastic pipe, qualified for use under this part if: 192.59(b) | | | | |
| 44. | | It was manufactured in accordance with a listed specification; 192.59(b)(1) | | | | |
| ••• | | It is resistant to chemicals with which contact may be anticipated; 192.59(b)(2) | | | | |
| | | • It has been used only in natural gas service. 192.59(b)(3)(4) | | | | |
| | 480-93-180 (1) | • Its dimensions are still within the tolerances of the specification to which it was | | | X | |
| | | manufactured; and, 192.59(b) • It is free of visible defects. 192.59(b)(5) ****Notes – PSE does not use used | | | | |
| | | plastic pipe*** | | | | |
| 45. | | Marking of Materials 192.63 ***Notes – In GOS 2450.1000 Section 9**** | X | | | |
| Comr | nents: | | | | | |
| Com | 1101163. | | | | | |
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| | | CVIDDADE C. TITLE THE CO. | | | | |
| | | SUBPART C – PIPE DESIGN | | | | |

| | | SUBPART C – PIPE DESIGN | | | | |
|-----|----------------|---|---|---|-----|-----|
| | | Procedures for assuring that the minimum requirements for design of pipe are met | | | | |
| | | For Steel Pipe | S | U | N/A | N/C |
| 46. | | Pipe designed of sufficient wall thickness, or installed with adequate protection, to withstand anticipated external pressures and loads that will be imposed on the pipe after installation. 192.103 ***Notes – In GOS 2525.1100 Section 3.4**** | X | | | |
| 47. | | Design formula for steel pipe. 192.105(a) ***Notes – In GOS 2525.1100 Section 4**** | X | | | |
| 48. | | Yield strength (S) for steel pipe. 192.107 ***Notes – In GOS 2525.1100 Section 4.1.1**** | X | | | |
| 49. | | Nominal wall thickness (t) for steel pipe. 192.109 (a) & (b) | | | | |
| | | (a) If the nominal wt is not known Determined by measuring the thickness of each piece of pipe at quarter points on one end unless | | | | |
| | | (b) If the pipe is of uniform grade, size, and thickness and more than 10 lengths of pipeline, only 10 percent of the individual lengths, but not less than 10 lengths, need be measured. The thickness of the lengths that are not measured must be verified by applying a gauge set to the minimum thickness found by the measurement. The nominal wall thickness to be used in the design formula in §192.105 is the next wall thickness found in commercial specifications that is below the average of all the measurements taken. However, the nominal wall thickness used may not be more than 1.14 times the smallest measurement taken on pipe less than 20 inches (508 millimeters) in outside diameter, nor more than 1.11 times the smallest measurement taken on pipe 20 inches (508 millimeters) or more in outside diameter.***Notes – In GOS 2525.1100 Section 4.1.2. Did not find one for unknown WT**** | Х | | | |
| 50. | | Design factor (F) for steel pipe. 192.111 | | | | |
| 51. | 480-93-180 (1) | (a) Except as otherwise provided in paragraphs (b), (c), and (d) of this section, the design factor to be used in the design formula in §192.105 is determined in accordance with the following Class location Design factor (F) table. Class 1 0.72, Class 2 0.60, Class 3 0.50, Class 4 0.40 ***Notes – In GOS 2525.1100 Section 4.1.3.1**** | X | | | |
| 52. | | (b) A design factor of 0.60 or less must be used in the design formula in §192.105 for steel pipe in Class 1 locations that: | | | | |
| | 480-93-180 (1) | (1) Crosses the right-of-way of an unimproved public road, without a casing; (2) Crosses without a casing, or makes a parallel encroachment on, the right-of-way of either a hard surfaced road, a highway, a public street, or a railroad; (3) Is supported by a vehicular, pedestrian, railroad, or pipeline bridge; or (4) Is used in a fabricated assembly, (including separators, mainline valve assemblies, cross-connections, and river crossing headers) or is used within five pipe diameters in any direction from the last fitting of a fabricated assembly, other than a transition piece or an elbow used in place of a pipe bend which is not associated with a fabricated assembly.***Notes – In GOS 2525.1100 Section 4.1.3.1**** | X | | | |
| 53. | | (c) For Class 2 locations, a design factor of 0.50, or less, must be used in the design formula in \$192.105 for uncased steel pipe that crosses the right-of-way of a hard surfaced road, a highway, a public street, or a railroad.***Notes – In GOS 2525.1100 Section 4.1.3.2**** | X | | | |
| 54. | | (d) For Class 1 and Class 2 locations, a design factor of 0.50, or less, must be used in the design formula in §192.105 for- (1) Steel pipe in a compressor station, regulating station, or measuring station, and (2) Steel pipe, including a pipe riser, on a platform located offshore or in inland navigable waters. ***Notes – In GOS 2525.1100 Section 4.1.3.1**** | X | | | |

| 55. | | Longitudinal joint factor (E) for steel pipe 4.1.4**** | e. 192.113 ***Notes – In GOS 2525.1100 Section | X | | | | |
|-----|----------------|--|---|---|--|--|--|--|
| 56. | 480-93-180 (1) | Temperature derating factor (T) for steel Section 4.1.5**** | pipe. 192.115 ***Notes – In GOS 2525.1100 | X | | | | |
| | | Fo | or Plastic Pipe | | | | | |
| 57. | 480-93-180 (1) | | or determining the design pressure for plastic pipe in 192.121 ***Notes – In GOS 2525.1100 Section | X | | | | |
| 58. | | For assuring that the design limitations fo | r plastic pipe are not exceeded. 192.123 (a) thru (e) | | | | | |
| | | may not exceed a gauge pressure of 100 p (1) Distribution systems; or (2) Classes 3 and 4 locations. (b) Plastic pipe may not be used where op (1) Below -20 °F (-20 °C), or -40 °F operating temperature will be below - manufacturer consistent with that operatin (2) Above the following applicable tempe (i) For thermoplastic pipe, the temperatur §192.121 is determined. (ii) For reinforced thermosetting plastic pi (c) The wall thickness for thermoplast millimeters). | and paragraph (f) of this section, the design pressure sig (689 kPa) for plastic pipe used in: erating temperatures of the pipe will be: (-40 °C) if all pipe and pipeline components whose 29 °C (-20 °F) have a temperature rating by the ag temperature; or ratures: erat which the HDB used in the design formula under | X | | | | |
| | | Nominal size in inches (millimeters). | Minimum wall thickness inches (millimeters). | 1 | | | | |
| | | 2 (51) | 0.060 (1.52) | | | | | |
| | | 3 (76) | 0.060 (1.52) | | | | | |
| | | 4 (102) | 0.070 (1.78) | | | | | |
| | | 6 (152) | 0.100 (2.54) | | | | | |
| | | pressure of 100 psig (689 kPa) provided the (1) The design pressure does not exceed 1 (2) The material is a polyethylene (PE) ASTM D2513-09a (incorporated by refere (3) The pipe size is nominal pipe size (IPS) | o The design pressure for thermoplastic pipe produced after July 14, 2004 may exceed a gauge essure of 100 psig (689 kPa) provided that: The design pressure does not exceed 125 psig (862 kPa); The material is a polyethylene (PE) pipe with the designation code as specified within STM D2513-09a (incorporated by reference, see §192.7); The pipe size is nominal pipe size (IPS) 12 or less; and The design pressure is determined in accordance with the design equation defined in | | | | | |
| | | ***Notes – In GOS 2525.1100 Section 5 | 5*** | | | | | |

| Comments: | | |
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| | | SUBPART D – DESIGN OF PIPELINE COMPONENTS | S | U | N/A | N/C |
|-----|----------------|--|---|---|-----|-----|
| | | For the design and installation of pipeline components and facilities, and relating to protection against accidental over-pressuring. 192.141 | | | | |
| 59. | | General requirements 192.143 ***Notes – In GOS 2525.1100 Section 3 **** | X | | | |
| 60. | | Qualifying metallic components. 192.144 (a) & (b) ***Notes – In GOS 2450.1000 Section 4 **** | X | | | |
| 61. | | For steel valves; meeting the minimum requirements of API 6D, or other standard that provides an equivalent performance level. 192.145 (a) thru (e)***Notes – In GOS 2450.1000 Section 6.1 **** | X | | | |
| 62. | 480-93-180 (1) | For each flange or flange accessory (other than cast iron) must meet the minimum requirements of ASME/ANSI B16.5, MSS SP-44, or the equivalent. 192.147 (a) thru (c)***Notes – In GOS 2450.1000 Section 7 **** | X | | | |
| 63. | | For ensuring that each new transmission line and each replacement of line pipe, valve, fitting, or other line component in a transmission line is designed and constructed to accommodate the passage of instrumented internal inspection devices. 192.150 (a) thru (c) ***Notes – In GOS 2525.1100 Section 6 **** | X | | | |
| 64. | | Components fabricated by welding. 192.153 (a) thru (d) ***Notes – In GOS 2525.1100 Section 8 **** | X | | | |
| 65. | | Welded branch connections. 192.155 ***Notes – In GOS 2525.1100 Section 9 **** | X | | | |
| 66. | | Flexibility. 192.159 ***Notes – In GOS 2525.1100 Section 11 **** | X | | | |
| 67. | | Supports and Anchors 192.161(a) (a) thru (f)***Notes – In GOS 2525.1100 Section 11 **** | X | | | |
| | | Compressor Stations | | | | |
| 68. | | Compressor stations: Design and construction. 192.163 (a) thru (e) ***Notes – No intrastate compressor stations*** | | | X | |
| 69. | 480-93-180 (1) | Compressor stations: Liquid removal. 192.165 (a) & (b) ***Notes – No intrastate compressor stations*** | | | X | |
| 70. | | Compressor stations: Emergency shutdown. 192.167 (a) thru (c) ***Notes – No intrastate compressor stations*** | | | X | |
| 71. | | Compressor stations: Pressure limiting devices. 192.169 (a) & (b) ***Notes – No intrastate compressor stations*** | | | X | |
| 72. | | Compressor stations: Additional safety equipment. 192.171 (a) thru (e)***Notes – No intrastate compressor stations*** | | | X | |
| 73. | 480-93-180 (1) | Compressor stations: Ventilation. 192.173 ***Notes – No intrastate compressor stations*** | | | X | |
| 74. | | Pipe-type and bottle-type holders. 192.175 ***Notes – None in system GOS 2400.0500 6.6*** | | | X | |
| 75. | | Additional provisions for bottle-type holders. 192.177 ***Notes – None in system GOS 2400.0500 6.6*** | | | X | |
| 76. | 480-93-180 (1) | Transmission line valves.192.179 (a) thru (d) ***Notes – GOS 2525.2600 Section 5*** | X | | | |

| | | SUBPART D – DESIGN OF PIPELINE COMPONENTS | S | U | N/A | N/C |
|-----|----------------|--|---|---|-----|-----|
| 77. | | Distribution line valves. 192.181(a) thru (c) ***Notes – GOS 2525.2600 Section 3, 4, 5*** | X | | | |
| 78. | | Vaults: Structural design requirements 192.183 (a) thru (c) ***Notes – GOS 2525.3200 Section 3*** | X | | | |
| 79. | | Vaults: Accessibility 192.185 (a) thru (c)***Notes – GOS 2525.3200 Section 4*** | X | | | |
| 80. | | Vaults: Sealing, venting, and ventilation. 192.187 (a) thru (c)***Notes – GOS 2525.3200 Section 4*** | X | | | |
| 81. | | Vaults: Drainage and waterproofing 192.189 (a) thru (c)***Notes – GOS 2525.3200 Section 6*** | X | | | |
| 82. | 480-93-180 (1) | Design pressure of plastic fittings 192.191 (a) & (b) ***Notes – These are contained in PSE's purchase specifications*** | X | | | |
| 83. | | Valve installation in plastic pipe. 192.193 ***Notes – GOS 2525.2600 Section 6.1.6*** | X | | | |
| 84. | | Protection against accidental over-pressuring 192.195 (a) & (b) ***Notes – GOS 2525.2900 Section 4, 5, 6*** | X | | | |
| 85. | | Control of the pressure of gas delivered from high-pressure distribution systems. 192.197 (a) thru (c) ***Notes – GOS 2550.1000 Section 7*** | X | | | |
| 86. | 480-93-180 (1) | Except for rupture discs, each pressure relief or pressure limiting device must: 192.199 (a) thru (h) ***Notes – GOS 2525.2900 Section 5.1.1 to 5.1.8*** | X | | | |
| 87. | | Required capacity of pressure relieving and limiting stations. 192.201(c) ***Notes – GOS 2525.2900 Section 6.3*** | X | | | |
| 88. | | Instrument, Control, and Sampling Pipe and Components 192.203(a) & (b) ***Notes – GOS 2525.2800 Section 4.1 to 4.19*** | X | | | |

| Comments: |
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| W | AC 480-93-080 - | SUBPART E – WELDING OF STEEL IN PIPELINES - WELDER & PLASTIC JOINER IDENTIFICATION and QUALIFICATION | S | U | N/A | N/C |
|-----|-----------------|---|---|---|-----|-----|
| 89. | | Welding procedures must be qualified under Section 5 of API 1104 or Section IX of ASME Boiler and Pressure Code (2001 ed.) by destructive test. Amdt. 192-103 pub 06/09/06, eff. 07/10/06225(a) ***Notes – GOS 2700.1400 Section 3.1 (API 1104)*** | X | | | |
| 90. | 480-93-180(1) | Retention of welding procedure – details and test .225(b) ***Notes – GOS 2700.1400 Section 5,6, and 7*** | X | | | |
| 91. | | Welders must be qualified by Section 6 of API 1104 (20 th edition 2007, including errata 2008) or Section IX of the ASME Boiler and Pressure Vessel Code (2007 edition, July 1, 2007), except that a welder qualified under an earlier edition than currently listed in 192.7 may weld, but may not requalify under that earlier edition. (Amdt 192-114 Pub. 8/11/10 eff. 10/01/10). ***Notes – GOS 2700.1400 Section 9.2*** | X | | | |
| 92. | | Welders may be qualified under section I of Appendix C to weld on lines that operate at < 20% SMYS227(b) ***Notes – GOS 2700.1100 Section 4 Table 4-1 and * portion discusses the 20% limitation.*** | X | | | |
| | | Oxyacetylene welders may qualify under 49 CFR § 192 Appendix C, but may only weld the following size pipe: 480-93-080(1)(a) | S | U | N/A | N/C |
| 93. | 480-93-180 (1) | Nominal two-inch or smaller branch connections to nominal six-inch or smaller main or service pipe. 480-93-080(1)(a)(i) ***Notes – GOS 2700.1100 Section 4 Table 4-1 and * portion discusses the 20% limitation.*** | X | | | |
| 94. | | Nominal two-inch or smaller below ground butt welds 480-93-080(1)(a)(ii) ***Notes – GOS 2700.1100 Section 4 Table 4-1 and * portion discusses the 20% limitation.*** | X | | | |
| 95. | 480-93-180(1) | Nominal four-inch or smaller above ground manifold and meter piping operating at | | | X | |

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

| | | 10 psig or less. 480-93-080(1)(a)(iii) ***Notes – Could not locate PSE does not have this exact configuration listed in their specifications. PSE has a procedure for Oxyacetylene Fillet Welding Pipe Diameters 2" thru 6"/Pipe Grades X42 and Lower in welding procedure 4900.1610.**** | | | | |
|------|---------------|--|---|---|-----|-----|
| 96. | | Appendix C Welders re-qualified 2/Yr (7.5Months) 480-93-080(1)(a)(iv) ***Notes – GOS 2700.1100 Section 6.2*** | X | | | |
| 97. | | Use of testing equipment to record and document essential variables 480-93-080(1)(b) (eff 6/02/05)***Notes – GOS 2700.1100 Section 3.3*** | X | | | |
| 98. | | Qualified written welding procedures must be located on-site where welding is being performed 480-93-080(1)(d) ***Notes – GOS 2425.1075 Section 3.4*** | X | | | |
| 99. | | Identification and qualification cards/certificates w/name of welder/joiner, their qualifications, date of qualification and operator whose qualification procedures were followed. 480-93-080(3) (eff 6/02/05)***Notes – GOS 2700.1100 Section 2.1.2*** | X | | | |
| 100. | | To weld on compressor station piping and components, a welder must successfully complete a destructive test .229(a) ***Notes – No compressors in the intrastate system*** | X | | | |
| 101. | | Welder must have used welding process within the preceding 6 months .229(b) ***Notes – GOS 2700.1100 Section 6.3*** | X | | | |
| 102. | | A welder qualified under .227(a)229(c) | | | | |
| 103. | 480-93-180(1) | May not weld on pipe that operates at ≥ 20% SMYS unless within the preceding 6 calendar months the welder has had one weld tested and found acceptable under the sections 6 or 9 of API Standard 1104; may maintain an ongoing qualification status by performing welds tested and found acceptable at least twice per year, not exceeding 7½ months; may not requalify under an earlier referenced edition. .229(c)(1) ***Notes – GOS 2700.1100 Section 6.3*** | X | | | |
| 104. | | May not weld on pipe that operates at < 20% SMYS unless is tested in accordance with .229(c)(1) or re-qualifies under .229(d)(1) or (d)(2)229(c)(2) ***Notes - GOS 2700.1100 Section 6.3*** | X | | | |
| | | Welders qualified under .227(b) may not weld unless: .229(d) | S | U | N/A | N/C |
| 105. | | • Re-qualified within 1 year/15 months, or .229(d)(1) ***Notes – GOS 2700.1100 Section 6.3 specifies 6 months for requalification.*** | X | | | |
| 106. | | • Within 7½ months but at least twice per year had a production weld pass a qualifying test .229(d)(2) ***Notes – GOS 2700.1100 Section 6.2.1.2*** | X | | | |
| 107. | 480-93-180(1) | Welding operation must be protected from weather .231 ***Notes – GOS 4900.1000 "Weld Environment **** | X | | | |
| 108. | | Miter joints (consider pipe alignment) .233 ***Notes - GOS 2575.2500 Section 7.5*** | X | | | |
| 109. | | Welding preparation and joint alignment .235 ***Notes – GOS 2525.2700 Section 4*** | X | | | |
| 110. | | Visual inspection must be conducted by an individual qualified by appropriate training and experience to ensure: .241(a) thru (c)***Notes – GOS 2700.1300 Section 3 *** | X | | | |
| 111. | | Nondestructive testing of welds must be performed by any process, other than trepanning, that clearly indicates defects that may affect the integrity of the weld .243 (a) thru (f) ***Notes – GOS 2700.1200 Section 4*** | X | | | |
| 112. | | Repair or removal of defects.245 (a) thru (c)***Notes – GOS 2700.1200 Section 6*** | X | | | |
| | | Sleeve Repair – low hydrogen rod (Best Practices –ref. API 1104 App. B, In Service Welding) | | | | |

| SUBPART F - JOINING OF PIPELINE MATERIALS OTHER THAN BY WELDING | C | T 7 | DT/A | NIC |
|---|---|------------|------|-----|

Joining of plastic pipe .281

Comments:

113.

WAC 480-93-080 - WELDER & PLASTIC JOINER IDENTIFICATION and QUALIFICATION

| A plastic pipe joint that is joined by solvent cement, adhesive, or heat fusion may not be disturbed until it has properly see. Plastic pipe may not be joined by a threaded joint or miter ioint. 281(a)******Potes - PSE GOS 2700.1700 Section 3.1***** Each solvent cement joint on plastic pipe must comply with the following: .281(b) 117. 118. 119. 118. 119. 119. 120. 480-93-180(1) 121. 480-93-180(1) 122. 124. 125. 126. A plastic pipe joint that is joined by solvent cement, adhesive, or heat fusion may not be disturbed until it has properly solven and adhesive must be clean, dry, and free of material which might be detrimental to the joint281(b)(1) ******Notes - PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** * The solvent cement must conform to ASTM Designation: D 2513, .281(b)(2) *****Notes - PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** * The joint may not be heated to accelerate the setting of the cement281(b)(3) *****Notes - PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** * A but heat-fusion joint must be joined by a device that holds the heater element square to the ends of the piping, compresses the heated ends together, and holds the pipie in proper alignment while the plastic hardens281(c)(1) *****Notes - GOS 2700.1700 Section 3.2.1**** * A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature281(c)(2) *****Notes - PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** * An electrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer281(c)(3) ****Notes - GOS 2700.1700 Section 3.2.2**** * Heat may not be applied with a torch or other open flame281(c)(4)****Notes - PSE does not use these types of joints per GOS 2400.0500 * The materials and adhesive must be compatible with the following: .281(d)(1)****Notes - PSE does not use th |
|--|
| 115. |
| Each solvent cement joint on plastic pipe must comply with the following: .281(b) |
| 116. 117. 118. 119. 119. 120. 121. 121. 121. 122. 123. 124. 125. 126. 127. 128. |
| be detrimental to the joint281(b)(1) *****Notes - PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** 118. 118. 119. 119. 120. 480-93-180(1) 121. 121. 122. 123. 124. 125. 126. 127. 127. 128. be detrimental to the joint281(b)(1) *****Notes - PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** A socket heat-fusion joint must be joined by a device that holds the heater element square to the ends of the piping, compresses the heated ends together, and holds the pipe in proper alignment while the plastic hardens281(c)(1) ****Notes - GOS 2700.1700 Section 3.2.1**** A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature281(c)(2) ****Notes - PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** 122. 123. 124. 125. 126. 127. 128. be detrimental to the joint281(b)(0) ****Notes - GOS 2700.1700 Section 3.2.2**** A leader of the joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of \$192.283(a)(1)(ii), to be at least equivalent to those of the fittings manufacturer or equipment and techniques of the fittings manufacturer281(c)(3) ****Notes - GOS 2700.1700 Section 3.2.2*** Each adhesive joint on plastic pipe must comply with the following: .281(d) 126. 127. 128. 129. 120. 120. 121. 121. 122. 123. 124. 125. 126. 127. 128. 128. 129. 129. 129. 120. 120. 120. 120. 120. 120. 121. 121. 122. 123. 124. 125. 126. 127. 128. 128. 129. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 121. 121. 122. 123. 124. 125. 125. 126. 127. 128. 128. 129. 129. 120. 120. 120. 120. 120. 120. |
| 117. 118. 119. 119. 120. 480-93-180(1) 121. 121. 122. 123. 124. 125. 126. 127. 128. 128. 128. 129. 129. 120. 120. 121. 120. 121. 120. 121. 121. 121. 122. 123. 124. 125. 126. 127. 128. 128. 128. 128. 129. 129. 120. 120. 120. 121. 121. 121. 122. 125. 126. 127. 128. 128. 128. 129. 129. 120. 120. 120. 120. 120. 120. 121. 121. 121. 122. 123. 124. 125. 126. 127. 127. 128. 128. 128. 129. 129. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 120. 121. 121. 122. 123. 124. 125. 126. 127. 127. 128. 128. 128. 129. 129. 120 |
| ****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** 118. 119. 120. 480-93-180(1) *****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** Each heat-fusion joint on plastic pipe must comply with the following: .281(c) **A butt heat-fusion joint must be joined by a device that holds the heater element square to the ends of the piping, compresses the heated ends together, and holds the pipe in proper alignment while the plastic hardens281(c)(1) ****Notes – GOS 2700.1700 Section 3.2.1**** **A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature281(c)(2) ****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** **A nelectrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of §192.283(a)(1)(iii), to be at least equivalent to those of the fittings manufacturer281(c)(3) ****Notes – GOS 2700.1700 Section 3.2.2**** 123. **A Heat may not be applied with a torch or other open flame281(c)(4) ****Notes – GOS 2700.1700 Section 3.2.3**** **Each adhesive joint on plastic pipe must comply with the following: .281(d) ****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** **The materials and adhesive must be compatible with each other281(d)(1)****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** **The gasket material in the coupling must be compatible with the plastic281(e)** **The gasket material in the coupling must be compatible with the plastic281(e)** **The gasket material in the coupling must be compatible with the plastic281(e)** **The gasket material in the coupling must be compatible with the plastic281(e)** **The gasket material in the coupling must be compatible with the plastic281(e)** **The gasket mate |
| 118. 6.4**** |
| 118. 119. 120. 121. 121. 122. 123. 124. 125. 126. 127. 128. 128. 128. 128. 128. 128. 128. 128 |
| 119. 120. 480-93-180(1) Each heat-fusion joint on plastic pipe must comply with the following: .281(c) 121. 480-93-180(1) 480-93-180(1) 480-93-180(1) 480-93-180(1 |
| 119. 120. 480-93-180(1) Each heat-fusion joint on plastic pipe must comply with the following: .281(c) 121. 480-93-180(1) • A buth heat-fusion joint must be joined by a device that holds the heater element square to the ends of the piping, compresses the heated ends together, and holds the pipe in proper alignment while the plastic hardens281(c)(1) ****Notes – GOS 2700.1700 Section 3.2.1**** • A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature281(c)(2) ****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** • An electrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of §192.283(a)(1)(ii), to be at least equivalent to those of the fittings manufacturer .281(c)(3) ****Notes – GOS 2700.1700 Section 3.2.2**** • Heat may not be applied with a torch or other open flame281(c)(4)****Notes – GOS 2700.1700 Section 3.2.3**** • The adhesive joint on plastic pipe must comply with the following: .281(d) • The adhesive must conform to ASTM Designation: D 2517281(d)(1)****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** • The materials and adhesive must be compatible with each other281(d)(1)***Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** Each compression type mechanical joint on plastic pipe must comply with the following: .281(e) • The gasket material in the coupling must be compatible with the plastic281(e)(1)***Notes – GOS 2700.1700 Section 3.3.1**** |
| Each heat-fusion joint on plastic pipe must comply with the following: .281(c) **A butt heat-fusion joint must be joined by a device that holds the heater element square to the ends of the piping, compresses the heated ends together, and holds the pipe in proper alignment while the plastic hardens281(c)(1) ****Notes – GOS 2700.1700 Section 3.2.1**** **A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature281(c)(2) ****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** **A nelectrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of \$192.283(a)(1)(iii), to be at least equivalent to those of the fittings manufacturer281(c)(3) ****Notes – GOS 2700.1700 Section 3.2.2**** ******************************* |
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| pipe in proper alignment while the plastic hardens281(c)(1) ****Notes – GOS 2700.1700 Section 3.2.1**** • A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature281(c)(2) ****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** • An electrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of \$192.283(a)(1)(iii), to be at least equivalent to those of the fittings manufacturer .281(c)(3) ****Notes – GOS 2700.1700 Section 3.2.2**** • Heat may not be applied with a torch or other open flame281(c)(4)****Notes – GOS 2700.1700 Section 3.2.3**** Each adhesive joint on plastic pipe must comply with the following: .281(d) • The adhesive must conform to ASTM Designation: D 2517281(d)(1)****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** • The materials and adhesive must be compatible with each other281(d)(1)****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** Each compression type mechanical joint on plastic pipe must comply with the following: .281(e) • The gasket material in the coupling must be compatible with the plastic281(e)(1)****Notes – GOS 2700.1700 Section 3.3.1**** |
| 2700.1700 Section 3.2.1**** • A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature. 2.81(c)(2) ***Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** • An electrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of \$192.283(a)(1)(iii), to be at least equivalent to those of the fittings manufacturer. 281(c)(3) ****Notes – GOS 2700.1700 Section 3.2.2**** • Heat may not be applied with a torch or other open flame. 281(c)(4)****Notes – GOS 2700.1700 Section 3.2.3**** 123. |
| A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature. .281(c)(2) ****Notes - PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** An electrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of §192.283(a)(1)(iii), to be at least equivalent to those of the fittings manufacturer281(c)(3) ****Notes - GOS 2700.1700 Section 3.2.2**** Heat may not be applied with a torch or other open flame281(c)(4)****Notes - GOS 2700.1700 Section 3.2.3**** Each adhesive joint on plastic pipe must comply with the following: .281(d) The adhesive must conform to ASTM Designation: D 2517281(d)(1)****Notes - PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** The materials and adhesive must be compatible with each other281(d)(1)****Notes - PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** Each compression type mechanical joint on plastic pipe must comply with the following: .281(e) The gasket material in the coupling must be compatible with eplastic281(e)(1)****Notes - GOS 2700.1700 Section 3.3.1**** |
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| 122. An electrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of §192.283(a)(1)(iii), to be at least equivalent to those of the fittings manufacturer. 281(c)(3) ***Notes – GOS 2700.1700 Section 3.2.2**** 123. Heat may not be applied with a torch or other open flame281(c)(4)***Notes – GOS 2700.1700 Section 3.2.3**** 124. Each adhesive joint on plastic pipe must comply with the following: .281(d) 125. The adhesive must conform to ASTM Designation: D 2517281(d)(1)****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** 126. The materials and adhesive must be compatible with each other281(d)(1)****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** 127. Each compression type mechanical joint on plastic pipe must comply with the following: .281(e) 128. The gasket material in the coupling must be compatible with the plastic281(e)(1)****Notes – GOS 2700.1700 Section 3.3.1**** |
| 2400.0500 Section 6.4**** • An electrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of §192.283(a)(1)(iii), to be at least equivalent to those of the fittings manufacturer281(c)(3) ****Notes – GOS 2700.1700 Section 3.2.2**** • Heat may not be applied with a torch or other open flame281(c)(4)****Notes – GOS 2700.1700 Section 3.2.3**** Each adhesive joint on plastic pipe must comply with the following: .281(d) • The adhesive must conform to ASTM Designation: D 2517281(d)(1)****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** 126. • The materials and adhesive must be compatible with each other281(d)(1)****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** Each compression type mechanical joint on plastic pipe must comply with the following: .281(e) • The gasket material in the coupling must be compatible with the plastic281(e)(1)****Notes – GOS 2700.1700 Section 3.3.1**** |
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| 281(d)(1)****Notes – PSE does not use these types of joints per GOS 2400.0500 Section 6.4**** Each compression type mechanical joint on plastic pipe must comply with the following: 281(e) The gasket material in the coupling must be compatible with the plastic. 281(e)(1)****Notes – GOS 2700.1700 Section 3.3.1**** |
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| .281(e)(1)****Notes – GOS 2700.1700 Section 3.3.1**** |
| .281(e)(1)****Notes – GOS 2700.1700 Section 3.3.1**** |
| A minid intermed typhylon of ifference of the state of th |
| |
| conjunction with the coupling281(e)(2) ****Notes – GOS 2700.1700 Section X |
| 3.3.2**** |
| Before any written procedure established under §192.273(b) is used for making plastic pipe |
| joints by a heat fusion, solvent cement, or adhesive method, the procedure must be qualified by subjecting specimen joints made according to the procedure to the following tests: .283(a) |
| 131. The burst test requirements of – .283(a)(1) |
| 132. • Thermoplastic pipe: paragraph 6.6 (sustained pressure test) or paragraph 6.7 (Minimum |
| Hydrostatic Burst Test) or paragraph 8.9 (Sustained pressure test) of paragraph 8.7 (Minimum Hydrostatic Burst Test) or paragraph 8.9 (Sustained Static pressure Test) of ASTM X |
| D2513 .283(a)(1)(i) ****Notes – GOS 2700.1700 Section 4.1.1**** |
| 133. • Thermosetting plastic pipe: paragraph 8.5 (Minimum Hydrostatic Burst Pressure) or |
| paragraph 8.9 (Sustained Static Pressure Test) of ASTM D2517; or .283(a)(1)(ii) |
| 480-93-180(1) ****Notes – PSE does not use this type of pipe (D2517)**** |
| +0V=7 1=10V111 |
| • Electrofusion fittings for polyethylene pipe and tubing: paragraph 9.1 (Minimum |
| • Electrofusion fittings for polyethylene pipe and tubing: paragraph 9.1 (Minimum Hydraulic Burst Pressure Test), paragraph 9.2 (Sustained Pressure Test), paragraph |
| • Electrofusion fittings for polyethylene pipe and tubing: paragraph 9.1 (Minimum |

| 40. | | | | - | |
|------|---------------|--|----|---|--|
| 135. | | For procedures intended for lateral pipe connections, subject a specimen joint made from pipe sections joined at right angles according to the procedure to a force on the lateral pipe until | | | |
| | | failure occurs in the specimen. If failure initiates outside the joint area, the procedure qualifies | X | | |
| | | for use; and, .283(a)(2) ****Notes – GOS 2700.1700 Section 4.1.3**** | | | |
| 136. | | For procedures intended for non-lateral pipe connections, follow the tensile test requirements of | | | |
| | | ASTM D638, except that the test may be conducted at ambient temperature and humidity If the | X | | |
| | | specimen elongates no less than 25 percent or failure initiates outside the joint area, the | Α. | | |
| 12- | | procedure qualifies for use283(a)(3)****Notes – GOS 2700.1700 Section 4.1.4**** | | | |
| 137. | | Before any written procedure established under §192.273(b) is used for making mechanical plastic pipe joints that are designed to withstand tensile forces, the procedure must be qualified | | | |
| | | by subjecting five specimen joints made according to the procedure to the following tensile test: | | | |
| | | 283(b) | | | |
| 138. | | Use an apparatus for the test as specified in ASTM D 638 (except for conditioning). | | | |
| | | .283(b)(1) ****Notes – GOS 2700.1700 Section 4.2.2**** | X | | |
| 139. | | The specimen must be of such length that the distance between the grips of the | | | |
| | 480-93-180(1) | apparatus and the end of the stiffener does not affect the joint strength283(b)(2) | X | | |
| | 400-75-100(1) | ****Notes – GOS 2700.1700 Section 4.2.1**** | | | |
| 140. | | • The speed of testing is 0.20 in. (5.0 mm) per minute, plus or minus 25 percent. | X | | |
| | | .283(b)(3) ****Notes – GOS 2700.1700 Section 4.2.3**** | ** | | |
| 141. | | • Pipe specimens less than 4 inches (102 mm) in diameter are qualified if the pipe yields | | | |
| | | to an elongation of no less than 25 percent or failure initiates outside the joint area. | X | | |
| 142. | | .283(b)(4) ****Notes – GOS 2700.1700 Section 4.2.4**** • Pipe specimens 4 inches (102 mm) and larger in diameter shall be pulled until the pipe is | | | |
| 142. | | subjected to a tensile stress equal to or greater than the maximum thermal stress that | | | |
| | | would be produced by a temperature change of 100° F (38° C) or until the pipe is | | | |
| | | pulled from the fitting. If the pipe pulls from the fitting, the lowest value of the five | X | | |
| | | test results or the manufacturer's rating, whichever is lower must be used in the design | | | |
| | | calculations for stress283(b)(5) ****Notes – GOS 2700.1700 Section 4.2.5**** | | | |
| 143. | | • Each specimen that fails at the grips must be retested using new pipe283(b)(6) | X | | |
| 144 | | ****Notes – GOS 2700.1700 Section 4.2.6**** | | | |
| 144. | | Results pertain only to the specific outside diameter, and material of the pipe tested, except that testing of a heavier wall pipe may be used to qualify pipe of the same | | | |
| | | material but with a lesser wall thickness283(b)(7) ****Notes – GOS 2700.1700 | X | | |
| | | Section 4.2.7*** | | | |
| 145. | | A copy of each written procedure being used for joining plastic pipe must be available to the | | | |
| | | persons making and inspecting joints283(c)****Notes – GOS 2700.1700 Section 4.3**** | X | | |
| 146. | | Pipe or fittings manufactured before July 1, 1980, may be used in accordance with procedures | | | |
| | | that the manufacturer certifies will produce a joint as strong as the pipe283(d) ****Notes – | X | | |
| | | GOS 2700.1700 Section 4.4**** | | | |
| 147. | | No person may make a plastic pipe joint unless that person has been qualified under the | | | |
| 148. | | applicable joining procedure by: .285(a) | | | |
| 148. | | Appropriate training or experience in the use of the procedure; and .285(a)(1) ****Notes – GOS 2700.1600 Section 5**** | X | | |
| 149. | | | | | |
| 177. | | Making a specimen joint from pipe sections joined according to the procedure that passes the inspection and test set forth in paragraph (b) of this section. | X | | |
| | 480 03 190/1\ | .285(a)(2)****Notes – GOS 2700.1600 Section 5**** | 23 | | |
| 150. | 480-93-180(1) | The specimen joint must be: .285(b) | | | |
| 151. | | Visually examined during and after assembly or joining and found to have the same | | | |
| | | appearance as a joint or photographs of a joint that is acceptable under the procedure; | X | | |
| | | and .285(b)(1) ****Notes – GOS 2700.1600 Section 8**** | | | |
| 152. | | • In the case of a heat fusion, solvent cement, or adhesive joint; .285(b)(2) ****Notes – | X | | |
| | | GOS 2700.1700 Section 4.1.4*** | Λ | | |
| 153. | | Tested under any one of the test methods listed under §192.283(a) applicable to | | | |
| | | the type of joint and material being tested; .285(b)(2)(i) ****Notes – GOS | X | | |
| | | 2700.1700 Section 4.2**** | | | |

| 154. | 480-93-180(1) | Examined by ultrasonic inspection and found not to contain flaws that may cause failure; or .285(b)(2)(ii) ****Notes – Not used by PSE**** | | X | |
|------|-------------------------------|---|---|---|--|
| 155. | | Cut into at least three longitudinal straps, each of which is: .285(b)(2)(iii) ****Notes – GOS 2700.1600 Section 9.2.1.3 They use 4 for butt fusion and five to qualify a procdecure under 2700.1700 4.2 **** | X | | |
| 156. | | Visually examined and found not to contain voids or discontinuities on the cut surfaces of the joint area; and .285(b)(2)(iii)(A) ****Notes – GOS 2700.1600 Section 9.2.3.1**** | X | | |
| 157. | | Deformed by bending, torque, or impact, and if failure occurs, it must not initiate in the joint area285(b)(2)(iii)(B) OS 2700.1600 (9.2) | X | | |
| 158. | | A person must be requalified under an applicable procedure, if during any 12-month period that person: .285(c) | | | |
| 159. | | • Does not make any joints under that procedure; or .285(c)(1) OS 2700.1600 (6.1) | X | | |
| 160. | 480-93-180(1) | Has 3 joints or 3 percent of the joints made, whichever is greater, under that procedure that are found unacceptable by testing under §192.513285(c)(2) OS 2700.1600 (7.2) | X | | |
| 161. | | Each operator shall establish a method to determine that each person making joints in plastic pipelines in the operator's system is qualified in accordance with this section285(d) OS 2700.1600 (2.1) | X | | |
| | | Plastic pipe joiners re-qualified 1/Yr (15 Months) 480-93-080 (2) | | | |
| 162. | | • Qualified written plastic joining procedures must be located on-site where plastic joining is being performed. 480-93-080(2)(a) OS 2700.1700 (4.3) | X | | |
| 163. | 480-93-180(1) | • Plastic pipe joiners re-qualified if no production joints made during any 12 month period 480-93-080(2)(b) (eff 6/02/05) OS 2700.1600 (6.1) | X | | |
| 164. | | Tracking production joints or re-qualify joiners 1/Yr (12Months) 480-93-080(2)(c) (eff 6/02/05) OS 2700.1600 (11.1) | X | | |
| 165. | 480-93-180(1) / 192.273(b) | No person may carry out the inspection of joints in plastic pipes required by §§192.273(c) and 192.285(b) unless that person has been qualified by appropriate training or experience in evaluating the acceptability of plastic pipe joints made under the applicable joining procedure287 OS 2700.1600 (10) | X | | |

| Comments: | | |
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| | | |

| SU | JBPART G – CO | ONSTRUCTION REQUIREMENTS for TRANSMISSION LINES and MAINS | S | U | N/A | N/C |
|------|---------------|--|---|---|-----|-----|
| 166. | | Compliance with specifications or standards. 192.303 OS 2525.2700 (3.1) | X | | | |
| 167. | | Inspection of each transmission line and main during construction 192.305 OS 2425.1800 (3.1) | X | | | |
| 168. | | Inspection of materials 192.307 OS 2525.1200 (6.11), OS 2525.2700 (7.1) | X | | | |
| 169. | 480-93-180(1) | Repair of steel pipe 192.309 (a) thru (e) OS 2575.1700 (3) | X | | | |
| 170. | | Repair of plastic pipe. 192.311 OS 2525.1200 (6.11) | X | | | |
| 171. | | Bends and elbows. 192.313 (a) thru (c) OS 2525.2700 (5) | X | | | |
| 172. | | Wrinkle bends in steel pipe. 192.315 (a) & (b) | | | X | |
| 173. | | Protection from hazards 192.317 (a) thru (c) OS 2525.1100 (12) | X | | | |
| 174. | | Installation of Pipe in a ditch 192.319 (a) thru (c) OS 2525.1800 (3) | X | | | |
| 175. | | Installation of plastic pipe. 192.321 (a) thru (h) OS 2525.1200 (6) | X | | | |
| | | 480-93-178 WAC | S | U | N/A | N/C |

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

| | | PROTECTION OF PLASTIC PIPE | | | |
|------|---------------|---|---|--|--|
| 176. | | Procedures for the storage, handling, and installation of plastic pipelines in accordance with the latest applicable manufacturer's recommended practices. 480-93-178(1) OS 2450.1500 (3) | X | | |
| 177. | | Stated acceptable time limit for maximum cumulative ultraviolet light exposure 480-93-178 (2) OS 2450.1500 (3) | X | | |
| 178. | | Separation requirements when installing plastic pipelines parallel to other underground utilities 480-93-178 (4) OS 2525.1700 (6.6) | X | | |
| 179. | 480-93-180(1) | Separation requirements when installing plastic pipelines perpendicular to other underground utilities 480-93-178 (5) OS 2525.1700 (6.6) | X | | |
| 180. | | Casings 192.323 (a) thru (d) OS 2525.1900 (4) | X | | |
| 181. | | Casing of pipelines. 480-93-115 (1) thru (4) OS 2525.1900 (4) | X | | |
| 182. | | Underground clearance. 192.325 (a) thru (d). OS 2525.1700 (6.6) | X | | |
| 183. | | Cover. 192.327 (a) thru (g) OS 2525.1700 (7) | X | | |

Comments:

Item 172 – Wrinkle bends are not allowed in PSE's system

| | | | S | U | N/A | N/C |
|------|----------------|--|---|---|-----|-----|
| 184. | | Meters and service regulators installed at locations as prescribed under 192.353 (a) thru (d) OS 2550.1800 (3.10) | X | | | |
| 185. | 480-93-180 (1) | Service regulator vents and relief vents installed and protected from damage. Vaults housing meters and regulators protected from loading due to vehicular traffic. 192.355 (a) thru (c) OS 2550.1000 (3.3) | X | | | |
| 186. | 480-93-180 (1) | Meters and regulators installed to minimize stresses and insure that potential releases vent to outside atmosphere. 192.357 (a) thru (d) OS 2550.1000 (3.3, 3.5) | X | | | |
| | | 480-93-140 WAC SERVICE REGULATORS | S | U | N/A | N/C |
| 187. | 480-93-180 (1) | Procedures for installing, operating, and maintaining service regulators in accordance with federal and state regulations, and manufacturer's recommended installation and maintenance practices. 480-93-140(1) OS 2550.1200 (3) | X | | | |
| 188. | | Procedures for inspecting and testing service regulators and associated safety devices during the initial turn-on, and when a customer experiences a pressure problem. Testing must include 480-93-140(2) OS 2575.1000 (3) | X | | | |
| 189. | | Minimum service line installation requirements as prescribed under 192.361 (a) thru (g) OS 2525.1700 (7.5), OS 2525.1800 (3.1), OS 2525.2800 (4.1), OS 2550.2000 (5.4) | X | | | |
| 190. | | Location of service-line valves as prescribed under 192.365 (a) thru (c) OS 2550.1600 (8) | X | | | |
| 191. | 480-93-180 (1) | General requirements for locations of service-line connections to mains and use of compression fittings 192.367 (a) thru (b)(2) OS 2550.2000 (5.2, 5.4) | X | | | |
| 192. | | Connections of service lines to cast iron or ductile iron mains. 192.369 (a) thru (b) | | | X | |
| 193. | | Provisions for new service lines not in use 192.379 (a) thru (c) OS 2550.2000 (12) | X | | | |
| 194. | | EFV performance requirements \$192.381 (a) thru (e) OS 2550.2200 (3, 4, 8) | X | | | |
| 195. | | Excess flow valves, does the program meet the requirements outlined in §192.381? | X | | | |
| 196. | | Customer notification in accordance with §192.383. OS 2550.2200 (3, 7) | X | | | |

| Comments: |
|---|
| Item 192 – PSE has no cast/ductile iron mains |
| |
| |

| | | SUBPART I - CORROSION CONTROL | S | U | N/A | N/C |
|------|---------------|---|---|---|-----|-----|
| | | | | | | |
| 197. | 480-93-180(1) | Corrosion procedures established for the Design, Operations, Installation & Maintenance of CP systems, carried out by, or under the direction of, a person qualified in pipeline corrosion control methods .453 OS 2600.1000 (3.1) | X | | | |
| 198. | 480-93-180(1) | For pipelines installed after July 31, 1971 , buried segments must be externally coated and .455 (a) cathodically protected within one year after construction (see exceptions in code) .455 (b) OS 2600.1000 (3.2) | X | | | |
| 199. | 480-93-180(1) | Aluminum may not be installed in a buried or submerged pipeline if exposed to an environment with a natural pH in excess of 8 (see exceptions in code) .455 (c) | | | X | |
| 200. | 480-93-180(1) | Adequate guidance included for the installation of aluminum in a submerged or buried pipeline? .455(e) | | | X | |
| 201. | 480-93-180(1) | All effectively coated steel transmission pipelines installed prior to August 1, 1971 , must be cathodically protected .457 (a) OS 2600.1000 (3.4) | X | | | |
| 202. | | If installed before August 1, 1971 , cathodic protection must be provided in areas of active corrosion for: bare or ineffectively coated transmission lines, and bare or coated c/s, regulator sta., meter sta. piping, and (except for cast iron or ductile iron) bare or coated distribution lines457 (b) OS 2600.1000 (3.2) | X | | | |
| 203. | | Written procedures explaining how cathodic protection related surveys, reads, and tests will be conducted. 480-93-110(4) OS 2450.1600, 2575.2800, 2600.1000, 2600.1500, 2600.1900, 2625.1100 | X | | | |
| 204. | | Examination of buried pipeline when exposed: if corrosion is found, further investigation is required .459 OS 2575.2800 (3) | X | | | |
| 205. | | Recording the condition of all underground metallic facilities each time the facilities are exposed. 480-93-110(6) OS 2575.2800 (3) | X | | | |
| 206. | 400.00 400.41 | CP test reading on all exposed facilities where coating has been removed 480-93-110(8) (eff 6/02/05) OS 2575.2800 (3.1) | X | | | |
| 207. | 480-93-180(1) | Procedures must address the protective coating requirements of the regulations. External coating on the steel pipe must meet the requirements of this part461 | S | U | N/A | N/C |
| 208. | | Cathodic protection level according to Appendix D criteria .463 OS 2600.1500 (5.1) | X | | | |
| 209. | | Pipe-to-soil monitoring (1 per yr/15 months) .465(a) OS 2600.1500 (4.1) | X | | | |
| 210. | | Rectifier monitoring (6 per yr/2½ months) .465(b) OS 2600.1500 (4.2) | X | | | |
| 211. | | Interference bond monitoring (as required) .465(c) OS 2600.1500 (4.3) | X | | | |
| 212. | 480-93-180(1) | Remedial action taken within 90 days (Up to 30 additional days if other circumstances. Must document) 480-93-110(2) OS 2600.1900 (4.1) | X | | | |
| 213. | .50 75 100(1) | Electrical surveys (closely spaced pipe to soil) on bare/unprotected lines, cathodically protect active corrosion areas (1 per 3 years/39 months) .465(e) OS 2600.1600 (3) | X | | | |
| 214. | | Electrical Isolation .467(a-e) OS 2600.1400 (4) | X | | | |
| 215. | | Sufficient test stations to determine CP adequacy .469 OS 2600.1200 (3, 4) | X | | | |
| 216. | | Test lead maintenance .471 OS 2600.1200 (5) | X | | | |
| 217. | | Interference currents .473 OS 2600.1400 (4.1), OS 2600.1300 (5.2) | X | | | |

| | | SUBPART I - CORROSION CONTROL | S | U | N/A | N/C |
|------|---------------|--|---|---|-----|-----|
| 218. | | Proper procedures for transporting corrosive gas? .475(a) OS 2600.1700 (3) | X | | | |
| 219. | | Written program to monitor for indications of internal corrosion. The program must also have remedial action requirements for areas where internal corrosion is detected. 480-93-110(7) (eff 6/02/05) OS 2600.1700 | X | | | |
| 220. | | Removed pipe must be inspected for internal corrosion. If found, the adjacent pipe must be inspected to determine extent. Certain pipe must be replaced. Steps must be taken to minimize internal corrosion475(b) OS 2600.1700 (4) | X | | | |
| 221. | | Systems to reduce internal corrosion Amdt 192- (no number) Pub. 4/23/07, eff. 5/23/07 (a) New construction .476 OS 2525.1100 (7) | X | | | |
| 222. | | (b) Exceptions – offshore pipeline and systems replaced before 5/23/07 OS 2525.1100 (7.2) | X | | | |
| 223. | | (c) Evaluate impact of configuration changes to exisiting systems OS 2525.1100 (7.3) | X | | | |
| 224. | 480-93-180(1) | Internal corrosion control coupon (or other suit. Means) monitoring (2 per yr/7½ months) .477 OS 2600.1700 (5.1) | X | | | |
| 225. | | Each exposed pipe must be cleaned and coated (see exceptions under .479(c)) .479(a) OS 2600.1100 (3, 7) | X | | | |
| 226. | | Offshore splash zones and soil-to-air interfaces must be coated OS 2600.1800 (6) | X | | | |
| 227. | | Coating material must be suitable .479(b) OS 2600.1100 (4) | X | | | |
| 228. | | Coating is not required where operator has proven that corrosion will: .479(c) | | | | |
| 229. | | 1. Only be a light surface oxide, or .479(c)(1) OS 2600.1800 (6.2) | X | | | |
| 230. | | 2. Not affect safe operation before next scheduled inspection .479(c)(2) OS 2600.1800 (6.2) | X | | | |
| 231. | | Written atmospheric corrosion control monitoring program. The program must have time frames for completing remedial action. 480-93-110(9) (eff 6/02/05) OS 2600.1900 | X | | | |
| 232. | | Atmospheric corrosion control monitoring (1 per 3 yrs/39 months onshore; 1 per yr/15 months offshore) .481(a) OS 2600.1800 (5) | X | | | |
| 233. | | Special attention required at soil/air interfaces, thermal insulation, under dis-bonded coating, pipe supports, splash zones, deck penetrations, spans over water .481(b) OS 2600.1800 (3.3) | X | | | |
| 234. | | Protection must be provided if atmospheric corrosion is found (per §192.479) .481(c) OS 2600.1900 (7) | X | | | |
| 235. | | Replacement and required pipe must be coated and cathodically protected (see code for exceptions) .483 OS 2600.1900 (3) | X | | | |
| 236. | | Procedures to replace pipe or reduce the MAOP if general corrosion has reduced the wall thickness? .485(a) OS 2600.1900 (6) | X | | | |
| 237. | 400.02.100/1) | Procedures to replace/repair pipe or reduce MAOP if localized corrosion has reduced wall thickness (unless reliable engineering repair method exists)? .485(b) OS 2600.1900 (6) | X | | | |
| 238. | 480-93-180(1) | Procedures to use Rstreng or B-31G to determine remaining wall strength? .485(c) OS 2600.1900 (6) | X | | | |
| 239. | | Remedial measures (distribution lines other than cast iron or ductile iron) .487 OS 2600.1900 (6) | X | | | |
| 240. | | Remedial measures (cast iron and ductile iron pipelines) .489 | | | X | |
| 241. | | Records retained for <u>each</u> cathodic protection test, survey, or inspection required by 49 CFR Subpart I, and chapter 480-93 WAC. 480-93-110 OS 2600.1500 (7) | X | | | |
| 242. | | Corrosion control maps and record retention (pipeline service life or 5 yrs) .491 OS 2600.1500 (7) | X | | | |
| | | WAC 480-93-110 Corrosion Requirements | S | U | N/A | N/C |
| 243. | | Casings inspected/tested annually not to exceed fifteen months 480-93-110(5) OS 2600.1500 (4.4) | X | | | |

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

| | SUBPART I - CORROSION CONTROL | | | | | N/C |
|------|-------------------------------|--|---|--|--|-----|
| 244. | 480-93-180(1) | Casings w/no test leads installed prior to 9/05/1992. Demonstrate other acceptable test methods 480-93-110(5)(a) OS 2600.1500 (6.2.3.3) references In FP 4515.1770 | X | | | |
| 245. | | Possible shorted conditions – Perform confirmatory follow-up inspection within 90 days 480-93-110(5)(b) OS 2600.1900 (5), OS 2600.1500 (5.3) | X | | | |
| 246. | | Casing shorts cleared when practical 480-93-110(5)(c) OS 2600.1900 (5) | X | | | |
| 247. | 480-93-180(1) | Shorted conditions leak surveyed within 90 days of discovery. Twice annually/7.5 months 480-93-110(5)(d) OS 2600.1900 (5) | X | | | |
| 248. | | CP Test Equipment and Instruments checked for accuracy/intervals (Mfct Rec or Opr Sched) 480-93-110(3) OS 2450.1600 (7) | X | | | |

| \overline{C} | Λm | m | 40 | |
|----------------|----|---|--------|--|
| | | | | |

Items 199-200 – PSE has no buried or submerged aluminum pipelines Item 240 – PSE has no cast/ductile iron pipelines

| | | S | U | N/A | N/C | |
|------|---------------|--|---|-----|-----|--|
| 249. | | Procedures to ensure that the provisions found under 192.503(a) thru (d) for new segments of pipeline, or Return to Service segments of pipeline which have been relocated or replaced are met. OS 2525.3300 (3) | X | | | |
| 250. | | Strength test requirements for steel pipeline to operate at a hoop stress of 30 percent or more of SMYS. 192.505 (a) thru (e) OS 2525.3300 (7) | X | | | |
| 251. | 480-93-180(1) | Test requirements for pipelines to operate at a hoop stress less than 30 percent of SMYS and at or above 100 psig. 192.507 (a) thru (c) OS 2525.3300 (6) | X | | | |
| 252. | | Test requirements for pipelines to operate below 100 psig. 192.509 (a) & (b) OS 2525.3300 (5) | X | | | |
| 253. | | Test requirements for service lines. 192.511 (a) thru (c) OS 2525.3300 (8) | X | | | |
| 254. | | Test requirements for plastic pipelines. 192.513 (a) thru (d) OS 2525.3300 (4) | X | | | |
| 255. | | Environmental protection and safety requirements. 192.515 (a) & (b) OS 2525.3300 (3.3, 3.4) | X | · | | |
| 256. | | Records 192.517 Refer also to 480-93-170 (7) (a-h) below. OS 2525.3300 (10) | X | | | |

| Comments: | | | |
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| | WAC 480-93-170 PRESSURE TEST PROCEDURES | | | N/A | N/C |
|------|---|---|--|-----|-----|
| 257. | Notification in writing, to the commission, at least three business days prior to any pressure test of a gas pipeline that will have a MAOP that produces a hoop stress of twenty percent or more of the SMYS 480-93-170(1) OS 2525.3300 (11) | X | | | |
| 258. | • In Class 3 or Class 4 locations, as defined in 49 CFR § 192.5, or within one hundred yards of a building, must be at least eight hours in duration. 480-93-170(1)(a) OS 2525.3300 (6.5.5) | X | | | |

| 259. | 480-93-180(1) | When the test medium is to be a gas or compressible fluid, each operator must notify the appropriate public officials so that adequate public protection can be provided for during the test. 480-93-170(1)(b) OS 2525.3300 (11.1.1) | X | |
|------|---------------|---|---|--|
| 260. | | In an emergency situation where it is necessary to maintain continuity of service, the requirements of subsection (1) of this section and subsection (1)(a) may be waived by notifying the commission by telephone prior to performing the test. 480-93-170(1)(c) OS 2525.3300 (11.1.2) | X | |
| 261. | | Minimum test pressure for any steel service line or main, must be determined by multiplying the intended MAOP by a factor determined in accordance with the table located in 49 CFR § 192.619 (a)(2)(ii). 480-93-170(2) OS 2525.3300 (5.3, 6.5, 7.6, 8.9) | X | |
| 262. | | Re-testing of service lines broken, pulled, or damaged, resulting in the interruption of gas supply to the customer, must be pressure tested from the point of damage to the service termination valve prior to being placed back into service. 480-93-170(4) OS 2575.1800 (3.7) | X | |
| 263. | | Maintain records of all pressure tests performed for the life of the pipeline and document information as listed under 480-93-170(7) (a-h). OS 2525.3300 (10) | X | |
| 264. | 480-93-180(1) | Maintain records of each test where multiple pressure tests are performed on a single installation. 480-93-170(9) OS 2525.3300 (10.1.1) | X | |
| 265. | | Pressure testing equipment must be maintained, tested for accuracy, or calibrated, in accordance with the manufacturer's recommendations.480-93-170(10) OS 2450.1600 (3.3) | X | |
| 266. | | When there are no manufacturer's recommendations, then tested at an appropriate schedule determined by the operator. OS 2450.1600 (3.3) | X | |
| 267. | | Test equipment must be tagged with the calibration or accuracy check expiration date. OS 2450.1600 (5.4, 6.3, 7.3, 8.6, 9.3) | X | |

| Comments: | | |
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| SUBPART K - UPRATING | | | | | | | | |
|---------------------------|---------------|---|---|---|-----|-----|--|--|
| | | Provisions for meeting the minimum requirements for increasing maximum allowable operating pressure (uprating) for pipelines. | S | U | N/A | N/C | | |
| 268. | | General requirements. 192.553 (a) thru (d) OS 2575.2500 (4, 5) | X | | | | | |
| 269. | 480-93-180(1) | Uprating to a pressure that will produce a hoop stress of 30 % or more of SMYS in steel pipelines. 192.555 (a) thru (e) OS 2575.2500 (5.4) | X | | | | | |
| 270. | _ | Uprating: Steel pipelines to a pressure that will produce a hoop stress less than 30 % of SMYS: (plastic, iron, and ductile iron pipelines.) 192.557 (a) thru (d) OS 2575.2500 (4) | X | | | | | |
| WAC 480-93-155 - UPRATING | | | | | | | | |
| 271. | | Notification of uprate and submission of written plan 480-93-155 (1) OS 2575.2500 (12) | X | | | | | |
| 272. | 480-93-180(1) | Content of written plan 480-93-155 (1) (a) thru (j) OS 2575.2500 (4) | X | | | | | |
| 273. | | Uprates must be based on a previous or current pressure test that will substantiate the intended MAOP. 480-93-155 (2) OS 2575.2500 (7.15) | X | | | | | |

| Comments: | |
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S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

| | | SUBPART L - OPERATIONS | S | U | N/A | N/C |
|------|-------------------------------|--|---|---|-----|-----|
| 274. | 480-93-180(1) / | Procedural Manual Review – Operations and Maintenance (1 per yr/15 months) 192.605(a) Note: Including review of OQ procedures as suggested by PHMSA - ADB-09-03 dated 2/7/09 OS 2425.1000 (4.1) | X | | | |
| 275. | 192.605(a) | Availability of construction records, maps, operating history to operating personnel 192.605(b)(3) OS 2425.1075 (3.2) | X | | | |
| 276. | | Start up and shut down of the pipeline to assure operation within MAOP plus allowable buildup 192.605(b)(5) OS 2525.1400 4700.1000 also has storke and lockup 4700.1200 for MAOP control with valves. 4700.1300 and 4700.1310 for PE squeezing. | X | | | |
| 277. | | Periodic review of personnel work – effectiveness of normal O&M procedures 192.605(b)(8) OS 2425.1000 (3.6) | X | | | |
| 278. | 480-93-180(1) / 192.605(a) | Taking adequate precautions in excavated trenches to protect personnel from the hazards of unsafe accumulations of vapors or gas, and making available when needed at the excavation, emergency rescue equipment, including a breathing apparatus and a rescue harness and line 192.605(b)(9) In Safety Program manual in Appendix 6-16. | Х | | | |
| 279. | | Routine inspection and testing of pipe-type or bottle-type holders 192.605(b)(10) | | | X | |
| 280. | | Responding promptly to a report of a gas odor inside or near a building, unless the operator's emergency procedures under §192.615(a)(3) specifically apply to these reports. 192.605(b)(11) OS 2425.1400 (4.3) | X | | | |
| 281. | | Implementing the applicable control room management procedures required by 192.631. (Amdt. 192- 112, 74 FR 63310, December 3, 2009, eff. 2/1/2010)605(b)(12) OS 2425.2500 (3) | Х | | | |

Comments:

Item 279 – PSE has no pipe-type and bottle-type holders This is in the system description .

| | SUBPART L – OPERATIONS ABNORMAL OPERATING PROCEDURES – TRANSMISSION LINES | | | | | | | | | |
|------|---|---|---|---|-----|-----|--|--|--|--|
| | | Procedures for responding to, investigating, and correcting the cause of: 192.605(c)(1) | S | U | N/A | N/C | | | | |
| 282. | | Unintended closure of valves or shut downs 192.605(c)(1)(i) This is in the Jackson Prairie and Sumas manual GOS 2575.3020 | X | | | | | | | |
| 283. | 480-93-180(1) / 192.605(a) | • Increase or decrease in pressure or flow rate outside of normal operating limits 192.605(c)(1)(ii)This is in the Jackson Prairie and Sumas manual GOS 2575.3020 | X | | | | | | | |
| 284. | | Loss of communications 192.605(c)(1)(iii) This is in the Jackson Prairie and Sumas manual GOS 2575.3020 | X | | | | | | | |
| 285. | | The operation of any safety device 192.605(c)(1)(iv)This is in the Jackson Prairie and Sumas manual GOS 2575.3020 | X | | | | | | | |
| 286. | | Malfunction of a component, deviation from normal operations or personnel error 192.605(c)(1)(v)This is in the Jackson Prairie and Sumas manual GOS 2575.3020 | X | | | | | | | |

| | SUBPART L – OPERATIONS | | | | | | | |
|------|---|---|--|--|--|--|--|--|
| | ABNORMAL OPERATING PROCEDURES – TRANSMISSION LINES | | | | | | | |
| 287. | Checking variations from normal operation after abnormal operations ended at sufficient critical locations 192.605(c)(2)This is in the Jackson Prairie and Sumas manual GOS 2575.3020 | X | | | | | | |
| 288. | Notifying the responsible operating personnel when notice of an abnormal operation is received 192.605(c)(3)This is in the Jackson Prairie and Sumas manual GOS 2575.3020 | X | | | | | | |
| 289. | Periodic review of personnel work – effectiveness of abnormal operation procedures 192.605(c)(4)This is in the Jackson Prairie and Sumas manual GOS 2575.3020 | X | | | | | | |

| Comments: | |
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| | SUE | SPART – L CHANGE in CLASS LOCATION PROCEDURES | S | U | N/A | N/C |
|------|-------------------------------|---|---|---|-----|-----|
| 290. | 480-93-180(1) / 192.605(a) | Class location study - Does the process include a requirement that the operator conduct a study whenever an increase in population density indicates a change in the class location of a pipeline segment operating at a hoop stress that is more than 40% SMYS? 192.609 (a-f) GOS 2400.0500 6.1.2 All pipelines are designed and maintained to class 4. | X | | | |
| 291. | | Confirmation or revision of MAOP - Does the process include a requirement that the MAOP of a pipeline segment be confirmed or revised within 24 months whenever the hoop stress corresponding to the established MAOP is determined not to be commensurate with the existing class location? 192.611 Final Rule Pub. 10/17/08, eff. 12/22/08. GOS 2400.0500 6.1.2 All pipelines are designed and maintained to class 4. There are standards for Jackson Prairie/Interstate facilities (Interstate Transmission GOS 2525.1450) | X | | | |

| | SUBPART – L CONTINUING SURVEILLANCE PROCEDURES | | | | | N/C |
|------|--|---|---|--|--|-----|
| 292. | 192.613 | Procedures for surveillance and required actions relating to change in class location, failures, leakage history, corrosion, substantial changes in CP requirements, and unusual operating and maintenance conditions 192.613(a) GOS 2575.2700 | X | | | |
| 293. | 192.613 | Procedures requiring MAOP to be reduced, or other actions to be taken, if a segment of pipeline is in unsatisfactory condition 192.613(b) GOS 2575.2700 (7.6.3) | X | | | |

| | SUBP | ART – L DAMAGE PREVENTION PROGRAM PROCEDURES | S | U | N/A | N/C |
|------|-----------------|--|---|---|-----|-----|
| 294. | | Participation in a qualified one-call program, or if available, a company program that complies with the following: OS 2425.1600 (3.2) | X | | | |
| 295. | | Identify persons who engage in excavating .614(c)(1) PSE is a member of a qualified one-call system | X | | | |
| 296. | 480-93-180(1) / | Provide notification to the public in the One Call area .614(c) (2) PSE is a member of a qualified one-call system | X | | | |
| 297. | 192.605(a) | Provide means for receiving and recording notifications of pending excavations .614(c) (3) OS 2425.1600 (6) | X | | | |
| 298. | | Provide notification of pending excavations to the members .614(c) (4) PSE is a member of a qualified one-call system | X | | | |
| 299. | | Provide means of temporary marking for the pipeline in the vicinity of the excavations .614(c) (5) OS 2425.1600 (6) | X | | | |
| 300. | | Provides for follow-up inspection of the pipeline where there is reason to believe the pipeline could be damaged .614(c) (6) OS 2425.1600 (7) 1. Is the inspection done as frequently as necessary during and after the activities to verify the integrity of the pipeline? Yes | X | | | |

| | 2. In the case of blasting, does the inspection include leakage surveys? Yes | | | | |
|------|---|---|---|-----|-----|
| 301. | Damage Prevention (Operator Internal Performance Measures) | S | U | N/A | N/C |
| 302. | Does the operator have a quality assurance program in place for monitoring the locating and marking of facilities? Do operators conduct regular field audits of the performance of locators/contractors and take action when necessary? (CGA Best Practices v. 6.0, Best Practice 4-18. Recommended only, not required) ***Notes – There are field audits and "ride-alongs" with observations) The contractor tracks damages assigned to a certain technician. USIC**** | X | | | |
| 303. | Does operator include performance measures in facility locating services contracts with corresponding and meaningful incentives and penalties? ? ***Notes – If the contractor continually performs substandard work, they will not renew the contract. A contract change has recently occurred**** | X | | | |
| 304. | Do locate contractors address performance problems for persons performing locating services through mechanisms such as re-training, process change, or changes in staffing levels?****Notes – This is in the contractors plan.***** | X | | | |
| 305. | Does the operator periodically review the Operator Qualification plan criteria and methods used to qualify personnel to perform locates? ****Notes – They showed us testing results.**** | X | | | |
| 306. | Review operator locating and excavation <u>procedures</u> for compliance with state law and regulations. | X | | | |
| 307. | Are locates are being made within the timeframes required by state law and regulations? Examine record sample. ****Notes – The on time scorecard demonstrates these metrics.**** | X | | | |
| 308. | Are locating and excavating personnel properly <u>qualified</u> in accordance with the operator's Operator Qualification plan and with federal and state requirements? ****Notes – PSE approves USIC's test and in the 2013 UTC OQ audit went through this in detail.**** | X | | | |
| 309. | Informational purposes only. Not Required. Does the pipeline operator voluntarily submit pipeline damage statistics into the UTC Damage Information Reporting Tool (DIRT)? Operator may register at https://identity.damagereporting.org/cgareg/control/login.do Y X N | X | | | |
| 310. | PHMSA Areas of Emphasis: • Does the operator have directional drilling/boring procedures which include taking actions necessary to protect their facilities from the dangers posed by drilling and other trenchless technologies? ****Notes – They have a cross bore program that helps mitigate some risks associated with trenchless technology*** | X | | | |
| 311. | Does the operator review records of accidents and failures due to excavation damage to ensure causes of failures are addressed to minimize the possibility of reaccurence? ***Notes – GOS 2575.1900 Section 2 and 3**** | X | | | |

| Comments: | | | |
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| | SUBPART – L EMERGENCY PROCEDURES | S | U | N/A | N/C |
|------|--|---|---|-----|-----|
| 312. | Receiving, identifying, and classifying notices of events which require immediate response by the operator .615(a)(1) Note: Including third-party damage OS 2425.2300 (3) | X | | | |
| 313. | Establish and maintain communication with appropriate public officials regarding possible emergency .615(a)(2) ***GOS 2425.2300, 2.5.1*** | X | | | |
| 314. | Prompt response to each of the following emergencies: .615(a)(3) ***GOS 2425.2300, 3.6*** | X | | | |

| 315. | 480-93-180(1)/ | (i) Gas detected inside a building ***GOS 2425.2300, 3.6*** | X | |
|------|-----------------|--|---|---|
| 316. | 192.615 | (ii) Fire located near a pipeline ***GOS 2425.2300, 3.6*** | X | + |
| 317. | 1,2.013 | (iii) Explosion near a pipeline ***GOS 2425.2300, 3.6*** | X | + |
| 318. | | (iv) Natural disaster ***GOS 2425.2300, 3.6*** | X | |
| 319. | | ` ' | Λ | + |
| 319. | | Availability of personnel, equipment, instruments, tools, and material required at the scene of an emergency .615(a)(4) ***GOS 2425.2300, 3.8*** | X | |
| 320. | | Actions directed towards protecting people first, then property .615(a)(5) | | |
| | | Note: Including third-party damage where there is a possibility of multiple leaks and underground migration into nearby buildings. ***GOS 2425.2300, 3.4*** | X | |
| 321. | | Emergency shutdown or pressure reduction to minimize hazards to life or property .615(a)(6) ***GOS 2425.2300, 3.9*** | X | |
| 322. | | Making safe any actual or potential hazard to life or property .615(a)(7) ***GOS 2425.2300, 3.4*** | Х | |
| 323. | | Notifying appropriate public officials required at the emergency scene and coordinating planned and actual responses with these officials .615(a)(8) ***GOS 2425.2300, 3.11*** | X | |
| 324. | 480-93-180(1) / | Instructions for restoring service outages after the emergency has been rendered safe .615(a)(9) ***GOS 2425.2300, 3.13*** | X | |
| 325. | 192.615 | Investigating accidents and failures as soon as possible after emergency .615(a)(10) ***GOS 2475.1900, 3.2.1*** | X | |
| 326. | | Actions required to be taken by a controller during an emergency in accordance with 192.631. (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010)615(a)(11) ***GOS 2425.2500, 4.2.3*** | Х | |
| 327. | | Furnishing applicable portions of the emergency plan to supervisory personnel who are responsible for emergency action .615(b)(1) ***GOS 2425.2300, 2.1*** | X | |
| 328. | | Training appropriate employees as to the requirements of the emergency plan and verifying effectiveness of training .615(b)(2) ***GOS 2425.2300, 2.1.2*** | X | |
| 329. | | Reviewing activities following emergencies to determine if the procedures were effective .615(b)(3) ***GOS 2425.2300, 2.1.3*** | X | |
| 330. | | Establish and maintain liaison with appropriate public officials, such that both the operator and public officials are aware of each other's resources and capabilities in dealing with gas emergencies .615(c)(1-4); ADB-05-03 ***GOS 2425.2300, 2.4.4*** | X | |

| Comments: | | | |
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| | SUBF | PART – L PUBLIC AWARENESS PROGRAM PROCEDURES (Also in accordance with API RP 1162) | S | U | N/A | N/C |
|------|-----------------|---|---|---|-----|-----|
| 331. | | Public Awareness Program in accordance with API RP 1162 (Amdt 192-99 pub. 5/19/05, eff. 06/20/05 and Amdt 192 – not numbered pub 12/13/07 eff. 12/13/07)616 | | | | |
| 332. | | The operators program must specifically include provisions to educate the public, appropriate government organizations, and persons engaged in excavation related activities on: .616(d) ***GOS 2425.1500, 4.2*** | X | | | |
| 333. | 480-93-180(1) / | (1) Use of a one-call notification system prior to excavation and other ***GOS 2425.1500, 4.2.1*** | X | | | |
| 334. | 192.605(a) | (2) Possible hazards associated with unintended releases fram a gas pipeline facility; ***GOS 2425.1500, 4.2.2*** | X | | | |
| 335. | | (3) Physical indications of a possible release; ***GOS 2425.1500, 4.2.3*** | X | | | |
| 336. | | (4) Steps to be taken for public safety in the event of a gas pipeline release; ***GOS 2425.1500, 4.2.4*** | X | | | |
| 337. | | Does program include activities to advise affected municipalities, school districts, businesses, | X | | | |

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

| | and residents of pipeline facility locations616(e) ***GOS 2425.1500, 4.3*** | | | |
|------|---|---|---|--|
| 338. | The operator's program and the media used must be comprehensive enough to reach all areas the operator transports gas616(f) ***GOS 2425.1500, 4.4*** | X | | |
| 339. | Is the program conducted in English and any other languages commonly understood by a significant number of the population? .616(g) ***GOS 2425.1500, 4.6*** | X | | |
| 340. | Operations of a master meter | | X | |
| 341. | Operators of a Master Meter or petroleum gas system (unless the operator transports gas as a primary activity) must develop/implement a written procedure to provide it's customers public awareness messages twice annually: .616(j) (1) A description of the purpose and reliability of the pipeline; (2) An overview of the hazards of the pipeline and prevention measures used; (3) Information about damage prevention; (4) How to recognize and respond to a leak; and (5) How to get additional information. | | х | |
| 342. | IAW API RP 1162, the operator's program should be reviewed for effectiveness within four years of the date the operator's program was first completed. For operators in existence on June 20, 2005, who must have completed their written programs no later than June 20, 2006, the first evaluation is due no later than June 20, 2010616(h) ***Notes – This has already been accomplished GOS 2425.1500 4.1.1*** | X | | |

| | SI | UBPART – L FAILURE INVESTIGATION PROCEDURES | S | U | N/A | N/C |
|------|----------------------------|---|---|---|-----|-----|
| 343. | 480-93-180(1) / 192.617 | Analyzing accidents and failures including laboratory analysis where appropriate to determine cause and prevention of recurrence .617 ***GOS 2575.1900*** | X | | | |

Comments:

340-341. PSE does not operate master meters.

| | | SUBPART – L MAOP PROCEDURES | | | | |
|------|---|--|---|--|--|-----|
| | Note: If the operator is operating under a Special Permit, a Waiver or 192.620, the inspector needs to review the special conditions of the Special Permit, Waiver or refer to Attachment 1 for additional .620 requirements. | | | | | N/C |
| 344. | 480-93-180(1) | Establishing MAOP so that it is commensurate with the class location .619 ***GOS 2525.1400, 4.1.1.2*** | X | | | |
| 345. | 192.605(a) | MAOP cannot exceed the lowest of the following: | | | | |
| 346. | | • Design pressure of the weakest element; .619(a)(1) ***GOS 2525.1400, 4.1.1*** | X | | | |
| 347. | | • Test pressure divided by applicable factor .619(a)(2) ***GOS 2525.1400, 4.1.2*** | X | | | |
| 348. | 480-93-180(1) / 192.605(a) | • The highest actual operating pressure to which the segment of line was subjected during the 5 years preceding the applicable date in second column, unless the segment was tested according to .619(a)(2) after the applicable date in the third column or the segment was uprated according to subpart K. Note: For gathering line related compliance deadlines and additional gathering line requirements, refer to Part 192 including this amendment619(a)(3) ***GOS 2525.1400, 4.1.3*** | X | | | |

| | | Pipeline segment Onshore gathering line that first became subject to this part (other than § 192.612) after April 13, 2006Onshore transmission line that was a gathering line not | Pressure date March 15, 2006, or date line | Test date 5 years preceding applicable | | | |
|------|-----------------------------|---|---|--|---|---|--|
| | | subject to this part before March 15, 2006. | becomes subject to this part, whichever is later. | date in second column. | | | |
| | | Offshore gathering lines. | July 1, 1976. | July 1, 1971. | | | |
| 240 | | All other pipelines. | July 1, 1970. | July 1, 1965. | | + | |
| 349. | | Maximum safe pressure determined by operator. 4.1.6*** | | **GOS 2525.1400, | X | | |
| 350. | 480-93-180(1) 192.605(a) | Overpressure protective devices must be installed ***GOS 2525.1400, 4.1.6.1*** | | | X | | |
| 351. | | • The requirements on pressure restrictions in this section do not apply in the following instance. An operator may operate a segment of pipeline found to be in satisfactory condition, considering its operating and maintenance history, at the highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column of the table in paragraph (a)(3) of this section. An operator must still comply with § 192.611. Amdt 192-102 pub. 3/15/06, eff. 04/14/06. Note: For gathering line related compliance deadlines and additional gathering line requirements, refer to Part 192 including this amendment619(c) ***GOS 2525.1400, 4.2*** | | | X | | |
| 352. | | Refer to Attachment 1 for additional Alternative MAOP requirements. (Amdt. 192-107, 73 FR 62147, October 17, 2008, eff. 11/17/2008)620 | | | | | |
| 353. | | MAOP - High Pressure Distribution Systems .621 Note: New PA-11 design criteria is incorporated into 1 12/24/08) ***GOS 2525.1400, 4.1.4*** | | | X | | |
| 354. | | Max./Min. Allowable Operating Pressure - Low Pressure Di 2525.1400, 6.2*** | stribution Syste | ms .623 *** GOS | X | | |

| Comments: | | | |
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| | | WAC 480-93-015 ODORIZATION PROCEDURES | S | U | N/A | N/C |
|------|---------------|--|---|---|-----|-----|
| 355. | | Odorization of gas at the proper concentration in air 480-93-015 (1) 192.625(a-f) ****GOS 2650.1000, 3.1*** | X | | | |
| 356. | 480-93-180(1) | Use of odorant testing instrumentation/Monthly testing interval 480-93-015 (2) ***GOS 2650.1000, 4.1*** | X | | | |
| 357. | | Odorant Testing Equipment Calibration/Intervals (Annually or Manufacturers Recommendation) 480-93-015 (3) ***GOS 2650.1600, 3.3.1*** | X | | | |
| 358. | 480-93-180(1) | Records maintained for usage, odorant tests performed and equipment calibration (5yrs) 480-93-015(4) *** GOS 2650.1600, 11.1 *** | X | | | |

| Comments: | |
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| 0 0 | |

| | SUBPART – L PIPELINE PURGING PROCEDURES 1. 480-93-180(1) (a) Lines containing air must be properly purged. ***GOS 2525.3400*** 2. 480-93-180(1) (b) Lines containing gas must be properly purged ***GOS 2525.3400*** SUBPART – M MAINTENANCE PROCEDURES 3. 480-93-180(1) Each segment of pipeline that becomes unsafe must be replaced, repaired, or removed Service .703(b) ***GOS 2575.1700, 3.1*** | a | | | NUC | |
|--------|---|--|-------------------|--------------|--------|-----|
| 250 | SUBI | | S | U | N/A | N/C |
| 359. | 480-93-180(1 | | X | | | |
| | | Reference API RP 2201 for Best Practices 627 **** GOS 2700.1000, 3 *** | | | | |
| | | CLIDDA DE LA DIDEI INE DUDCING DIO CEDUDES | C | | T NT/A | NIC |
| 360. | 1 | | S | U | N/A | N/C |
| 300. | 480-93-180(1 | | X | | | |
| | .00 % 100(1 | .029 *****GUS 2525.3400**** | | | | |
| 361. | | | X | | | |
| 362. | 480-93-180(1 | (b) Lines containing gas must be properly purged ***GOS 2525.3400*** | X | | | |
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| Com | ments: | | | | | |
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| | | SUBPART – M MAINTENANCE PROCEDURES | S | U | N/A | N/C |
| 363. | 490 02 190/1 | Each segment of pipeline that becomes unsafe must be replaced repaired or removed from | | | | |
| | 480-93-180(1 | Service .703(b) ****GOS 2575.1700, 3.1*** | X | | | |
| 364. | 480-93-180(1 | Hazardous leaks must be repaired promptly .703(c) ***GOS 2575.1700, 3.2*** | X | \perp | | |
| Com | monta | | | | | |
| Com | iments: | | | | | |
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| | | COMPANDA POOMANANA CENTRANT PROCEDINE | | | | |
| : | * | | | \mathbf{S} | U N/A | N/C |
| .605(a |) .631(a) | CONTROL ROOM MANAGEMENT PROCEDURES (Amdr. 192-112, 74 FR 63310, December 3, 2009, eff, 2/1/2010) | | | | |
| (34 | , | (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010) | | | | |
| | | (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010) (1) This section applies to each operator of a pipeline facility with a controller working in a control who monitors and controls all or part of a pipeline facility through a SCADA system, exc | rol | | | |
| | | (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010) (1) This section applies to each operator of a pipeline facility with a controller working in a control who monitors and controls all or part of a pipeline facility through a SCADA system, exc where an operator's activities are limited to: | rol ept | | | |
| | | (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010) (1) This section applies to each operator of a pipeline facility with a controller working in a control who monitors and controls all or part of a pipeline facility through a SCADA system, excurred where an operator's activities are limited to: (ii) Transmission without a compressor station, the operator must have and follow write. | rol ept ten | | | |
| | | (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010) (1) This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system, exc where an operator's activities are limited to: (ii) Transmission without a compressor station, the operator must have and follow write procedures that implement only paragraphs (d) (regarding fatigue), (i) (regarding compliants) | rol ept ten | | | |
| | .631(a) | (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010) (1) This section applies to each operator of a pipeline facility with a controller working in a control who monitors and controls all or part of a pipeline facility through a SCADA system, exc where an operator's activities are limited to: (ii) Transmission without a compressor station, the operator must have and follow write procedures that implement only paragraphs (d) (regarding fatigue), (i) (regarding compliance validation), and (j) (regarding compliance and deviations) of this section. | rol ept ten | | | |
| | .631(a) | (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010) (1) This section applies to each operator of a pipeline facility with a controller working in a controom who monitors and controls all or part of a pipeline facility through a SCADA system, exc where an operator's activities are limited to: (ii) Transmission without a compressor station, the operator must have and follow write procedures that implement only paragraphs (d) (regarding fatigue), (i) (regarding compliant validation), and (j) (regarding compliance and deviations) of this section. (605(b)(12) Each operator must have and follow written control room management procedures. | rol ept ten nce | | | |
| | .631(a) | (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010) (1) This section applies to each operator of a pipeline facility with a controller working in a control who monitors and controls all or part of a pipeline facility through a SCADA system, exc where an operator's activities are limited to: (ii) Transmission without a compressor station, the operator must have and follow write procedures that implement only paragraphs (d) (regarding fatigue), (i) (regarding compliance validation), and (j) (regarding compliance and deviations) of this section. | rol ept ten nce | | | |

| * | | CONTROL ROOM MANAGEMENT PROCEDURES (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010) | S | U | N/A | N/C |
|-----|-----|---|---|---|-----|-----|
| .6 | | The operator's program must define the roles and responsibilities of a controller during normal, bnormal and emergency conditions including a definition of: ***GOS 2425.2500, 4.2.1-4.2.4*** | | | | |
| | (| (1) Controller's authority and responsibility. | X | | | |
| | (| (2) Controller's role when an abnormal operating condition is detected. | X | | | |
| | (| (3) Controller's role during an emergency | X | | | |
| | (| (4) A method of recording shift change responsibilities between controllers. | X | | | |
| .6 | | The operator's program must provide its controllers with the information, tools, processes and procedures necessary to perform each of the following: ***GOS 2425.2500, 4.3.1-4.3.5*** | | | | |
| | e | 1) Implement sections 1, 4, 8,9,11.2, and 11.3 of API RP 1165 whenever a SCADA System is added, expanded or replaced. | X | | | |
| | | 2) Conduct point-to-point verification between SCADA displays and related equipment when hanges that affect pipeline safety are made. | X | | | |
| | (. | 3) Test and verify any internal communications plan – at least once a year NTE 15 months. | X | | | |
| | (4 | 4) Test any backup SCADA system at least once each year but NTE 15 months. | X | | | |
| | (: | 5) Establish and implement procedures for when a different controller assumes responsibility. | X | | | |
| .6. | | Each operator must implement and follow methods to reduce the risk associated with controller fatigue, including: ***GOS 2425.2500, 4.4.1-4.4.4*** | | | | |
| | | 1) Establishing shift lengths and schedule rotations that provide time sufficient to achieve eight hours of continuous sleep. | X | | | |
| | (2 | 2) Educating controllers and supervisors in fatigue mitigation strategies. | X | | | |
| | (.) | 3) Training of controllers and supervisors to recognize the effects of fatigue. | X | | | |
| | (4 | 4) Establishing a maximum limit on controller hours-of-service. | X | | | |
| .6 | | Each operator must have a written alarm management plan including these provisions: ***GOS 425.2500, 4.5.1-4.5.6*** | | | | |
| | (| 1) Reviewing alarms using a process that ensures that they are accurate and support safe operations. | X | | | |
| | iı | 2) Identifying at least once a year, points that have been taken off SCADA scan or have had alarms nhibited, generated false alarms, or have had forced or manual values for periods of time exceeding hat required for maintenance activities. | X | | | |
| | (. | 3) Verifying the alarm set-point values and alarm descriptions once each year NTE 15 months. | X | | | |
| | (4 | 4) Reviewing the alarm management plan at least once every calendar year NTE 15 months. | X | | | |
| | | 5) Monitoring the content and volume of activity being directed to and required of each controller once each year NTE 15 months. | X | | | |
| | (6 | 6) Addressing deficiencies identified through implementation of 1-5 of this section. | X | | | |
| .6 | | Each operator must assure that changes that could affect control room operations are coordinated with the control room personnel by performing the following: ***GOS 2425.2500, 4.6.1-4.6.3*** | | | | |
| | | 1) Establishing communications between controllers, management and field personnel when mplementing physical changes to the pipeline. | X | | | |
| | fi | 2) Requiring field personnel to contact the control room when emergency conditions exist and when ield changes could affect control room operations. | X | | | |
| | S | 3) Seeking control room or management participation in planning prior to implementation of ignificant pipeline changes. | X | | | |
| .6. | | Each operator must assure that lessons learned from its experience are incorporated in to its procedures by performing the following: ***GOS 2425.2500, 4.7.1-4.7.2*** | | | | |

| * | | CONTROL ROOM MANAGEMENT PROCEDURES (Amdt. 192-112, 74 FR 63310, December 3, 2009, eff. 2/1/2010) | S | U | N/A | N/C |
|---|---------|--|---|---|-----|-----|
| | | (1) Reviewing reportable incidents to determine if control room actions contributed to the event and correcting any deficiencies. | X | | | |
| | | (2) Including lessons learned from the operator's training program required by this section. | X | | | |
| | .631(h) | Each operator must establish a controller training program and review its contents once a year NTE 15 months which includes the following elements: ***GOS 2425.2500, 4.8.3.1-4.8.3.5*** | | | | |
| | | (1) Responding to abnormal operating conditions (AOCs). | X | | | |
| | | (2) Using a computerized simulator or other method for training controllers to recognize AOCs | X | | | |
| | | (3) Training controllers on their responsibilities for communication under the operator's emergency response procedures. | X | | | |
| | | (4) Training that provides a working knowledge of the pipeline system, especially during AOCs. | X | | | |
| | | (5) Providing an opportunity for controllers to review relevant procedures for infrequently used operating setups. | X | | | |

| | SUBPART - M TRANSMISSION LINES - PATROLLING & LEAKAGE SURVEY PROCEDURES | | | | | | U | N/A | N/C |
|------|--|--|--------------------------------------|-----------------------|--|---|---|-----|-----|
| 365. | Patrolling ROW conditions .705(a) ***GOS 2575.3100, 3.1*** | | | | | X | | | |
| 366. | | Maximum interval betw | reen patrols of lines: .705 (b) **** | GOS 2575.3100, 4.2*** | | | | | |
| | 490.02.190/1 | Class Location | At Highway and Railroad Crossings | At All Other Places | | | | | |
| | 480-93-180(1) /192.605(b) | 1 and 2 | 2/yr (7½ months) | 1/yr (15 months) | | X | | | |
| | , = , = , = , = , | 3 | 4/yr (4½ months) | 2/yr (7½ months) | | | | | |
| | | 4 | 4/yr (4½ months) | 4/yr (4½ months) | | | | | |
| 367. | Leakage surveys – 1 year/15 months .706 ***GOS 2625.1100, TABLE 4-1*** | | | | | X | | | |
| 368. | | Leak detector equipment survey requirements for lines transporting un-odorized gas (N/A - All pipelines in WA require odorization) | | | | | | | |

| | | WAC 480-93-185 GAS LEAK INVESTIGATION | S | U | N/A | N/C |
|------|---------------|--|---|---|-----|-----|
| | | Procedures for the prompt investigation of any notification of a leak, explosion, or fire, which may involve gas pipelines or other gas facilities. | | | | |
| 369. | 480-93-180(1) | • received from any outside source such as a police or fire department, other utility, contractor, customer, or the general public 480-93-185(1) ***GOS 2625.1300, 3.1.2.2*** | X | | | |
| 370. | 480-93-180(1) | • Grade leak in accordance with WAC 480-93-186, and take appropriate action 480-93-185(1) ****GOS 2625.1300, 4.2*** | X | | | |
| 371. | 480-93-180(1) | • retain the leak investigation record for the life of the pipeline. 480-93-185(1) ***GOS 2625.1300, 5.1*** | X | | | |
| 372. | 480-93-180(1) | Prevent removal of any suspected gas facility until the commission or the lead investigative authority has designated the release of the gas facility and keep the facility intact until directed by the lead investigative authority 480-93-185(2) ***GOS 2625.1900, 5.1*** | X | | | |
| 373. | 480-93-180(1) | Taking appropriate action when leak indications originating from a foreign source. Notification requirements. 480-93-185(3) ***GOS 2625.1300, 3.1.2*** | X | | | |

| | WAC 480-93-186 LEAK EVALUATION | | S | U | N/A | N/C |
|------|-----------------------------------|--|---|---|-----|-----|
| 374. | 480-93-180(1) | Grade leaks as defined in WAC 480-93-18601 to establish the leak repair priority. 480-93-186(1) ***GOS 2625.1300, 4.2*** | X | | | |

| 375. | 480-93-180(1) | Procedure for evaluating the concentration and extent of gas leakage 480-93-186(2) Note: Including third-party damage where there is a possibility of multiple leaks and underground migration into nearby buildings. ***GOS 2625.1300, 4.1*** | X | | |
|------|---------------|---|---|--|--|
| 376. | 480-93-180(1) | Use of a combustible gas indicator to check the perimeter of a leak area. Follow-up inspection on repaired leaks no later than thirty days following repair. 480-93-186(3) ***GOS 2625.1300, 4.4.2*** | X | | |
| 377. | 480-93-180(1) | Grade 1 and 2 leaks downgraded once to Grade 3 leak without a physical repair. After downgrade, repair must be made not to exceed twenty-one months 480-93-186(4) ****GOS 2625.1300, 4.5.4*** | X | | |

| Comments: | | |
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| | | WAC 480-93-187 GAS LEAK RECORDS | S | U | N/A | N/C |
|------|---------------|--|---|---|-----|-----|
| | | Gas leak records must contain, at a minimum, the criteria outlined in 480-93-187 (1-13) | | | | |
| 378. | 480-93-180(1) | 1) Date and time the leak was detected, investigated, reported, and repaired, and the name of the employee(s) conducting the investigation; (2) Location of the leak (sufficiently described to allow ready location by other qualified personnel); (3) Leak grade; (4) Pipeline classification (e.g., distribution, transmission, service); (5) If reported by an outside party, the name and address of the reporting party; (6) Component that leaked (e.g., pipe, tee, flange, valve); (7) Size and material that leaked (e.g., steel, plastic, cast iron); (8) Pipe condition; (9) Type of repair; (10) Leak cause; (11) Date pipe installed (if known); (12) Magnitude and location of CGI readings left; and (13) Unique identification numbers (such as serial numbers) of leak detection equipment. ****GOS 2625.1300, 5**** | х | | | |

| Comments: | | | |
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| | | WAC 480-93-188 GAS LEAK SURVEYS | S | U | N/A | N/C |
|------|---------------|---|---|---|-----|-----|
| 379. | | gas leak surveys using a gas detection instrument covering areas listed in 480-93-188(1)(a-e) ***GOS 2625.1200, 3.2.1-3.2.5*** | X | | | |
| 380. | 480-93-180(1) | Gas detection instruments tested for accuracy/intervals (Mfct rec or monthly not to exceed 45 days) 480-93-188(2) ***GOS 2625.1200, 3.1.1/GOS 2450.1600, 3.3.4*** | X | | | |
| 381. | | Surveys conducted according to the minimum frequencies outlined under 480-93-188(3)(a-d) ***GOS 2625.1100, 4.1, TABLE 4-1*** | X | | | |

| 382. | Surveys conducted under the following circumstances outlined under 480-93-188(4)(a-e) ***GOS 2625.1100, 5.1.1-5.1.4*** | X | | |
|------|---|---|--|--|
| 383. | Survey records must be kept for a minimum of five years and contain information required under 480-93-188(5)(a-f) ***GOS 2625.1100, 7*** | X | | |
| 384. | Self audits as necessary, but not to exceed three years between audits and meet the criteria outlined under 480-93-188(6)(a-e) ***GOS 2625.1100, 6*** | X | | |

| Comments: | | |
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| | | PIPELINE MARKERS PROCEDURES | S | U | N/A | N/C |
|------|---------------|--|---|---|-----|-----|
| 385. | | Placement of markers - railroad, road, irrigation and drainage ditch crossings 480-93-124 (1) ***GOS 2525.2500, 4.1.1-4.1.8*** | X | | | |
| 386. | | Placement of markers - Separation/Other locations 480-93-124 (2) & 192.707 ***GOS 2525.2500, 4.2*** | X | | | |
| 387. | 490.02.190(1) | Installed at each end of bridges or other spans / Inspected 1/YR (15 Months) 480-93-124 (3) *** GOS 2575.1100 , 5.1 *** | X | | | |
| 388. | 480-93-180(1) | Markers reported missing or damaged replaced within 45 days? 480-93-124(4) *** GOS 2575.1100, 4.1.1 *** | X | | | |
| 389. | | Surveys of pipeline markers – Not to exceed 5/YR Records 10/Yrs minimum 480-93-124(5) *** GOS 2575.1100, 5.2 *** | X | | | |
| 390. | | Maintain maps, drawings or other records indicating class locations and other areas where pipeline markers are required 480-93-124(6) ***GOS 2525.2500, 8.3*** | X | | | |

| Comn | nents: | | | | | |
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| | | SUBPART - M | | | | |
| | | TRANSMISSION RECORD KEEPING PROCEDURES | S | U | N/A | N/C |
| 391. | | Records must be maintained709 ***GOS 2575.1700, 11*** | X | | | |
| 392. | 480-93-180(1)/ | (a) Repairs to the pipe – life of system ***GOS 2575.1700, 11.1*** | X | | | |
| 393. | 192.605 (b) | (b) Repairs to "other than pipe" – 5 years ***GOS 2575.1700, 11.2*** | X | | | |
| 394. | | (c) Operation (Sub L) and Maintenance (Sub M) patrols, surveys, tests – 5 years or until next one ***GOS 2575.1700, 11.3*** | X | | | |
| | | | - | | | |

| | | SUBPART - M | S | U | N/A | N/C |
|------|--------------------------------|---|---|---|------|-----|
| | | TRANSMISSION LINE FIELD REPAIR PROCEDURES | 3 | U | IN/A | N/C |
| | | Imperfections and Damages | | | | |
| 395. | | Repairs of imperfections and damages on pipelines operating above 40% SMYS | | | | |
| 396. | 480-93-180(1) / | • Cut out a cylindrical piece of pipe and replace with pipe of ≥ design strength .713(a)(1) ***GOS 2575.1700, 3.3, 4.10*** | X | | | |
| 397. | 192.605 (b) | • Use of a reliable engineering method .713(a)(2) ***GOS 2575.1700, 3.7, 4.8*** | X | | | |
| 398. | | Reduce operating pressure to a safe level during the repair .713(b) ***GOS 2575.1700, 3.6.2, 4.11.4*** | X | | | |
| | | Permanent Field Repair of Welds | | | | |
| 399. | | Welds found to be unacceptable under §192.241(c) must be repaired by: .715 | | | | |
| 400. | | (a) Taking the line out of service and repairing in accordance with §192.245: ***Welding 2700.1200 Section 6*** | X | | | |
| 401. | | Cracks longer than 8% of the weld length (except offshore) must be removed ***Welding 2700.1200 Section 8.1 doesn't allow cracks*** | X | | | |
| 402. | | For each weld that is repaired, the defect must be removed down to clean metal and the pipe preheated if conditions demand it | X | | | |
| 403. | | Repairs must be inspected to ensure acceptability | X | | | |
| 404. | 480-93-180(1) / 192.605 (b) | Crack repairs or defect repairs in previously repaired areas must be done in accordance with qualified written welding procedures | X | | | |
| 405. | | (b) If the line remains in service, the weld may be repaired in accordance with §192.245 if: | | | | |
| 406. | | • The weld is not leaking (1) ***GOS 2575.1700, 6.1.1*** | X | | | |
| 407. | | • The pressure is reduced to produce a stress that is 20% of SMYS or less (2) ***GOS 2575.1700, 6.1.2*** | X | | | |
| 408. | | Grinding is limited so that ¹/₈ inch of pipe weld remains (3) ***GOS 2575.1700, 6.1.3*** | X | | | |
| 409. | | • If the weld cannot be repaired in accordance with (a) or (b) above, a full encirclement welded split sleeve must be installed (c) ***GOS 2575.1700, 6.5*** | X | | | |
| | | Permanent Field Repair of Leaks | | | | |
| 410. | | Field repairs of leaks must be made as follows: .717 | | | | |
| 411. | | Replace by cutting out a cylinder and replace with pipe similar or of greater design (a) ***GOS 2575.1700, 8.1.1.1*** | X | | | |
| 412. | 480-93-180(1) / 192.605 (b) | Install a full encirclement welded split sleeve of an appropriate design unless the pipe is joined by mechanical couplings and operates at less than 40% SMYS (b)(1) ***GOS 2575.1700, 8.1.1.2*** | X | | | |
| 413. | | • A leak due to a corrosion pit may be repaired by installing a bolt on leak clamp (b)(2) ***GOS 2575.1700, 8.1.1.3*** | X | | | |
| 414. | 480-93-180(1) / 192.605 (b) | For a corrosion pit leak, if a pipe is not more than 40,000 psi SMYS, the pits may be repaired by fillet welding a steel plate. The plate must have rounded corners and the same thickness or greater than the pipe, and not more than ½D of the pipe size (b)(3) ****Notes - PSE does not make this type of repair.**** | | | Х | |
| 415. | | • Submerged offshore pipe or pipe in inland navigable waterways may be repaired with a mechanically applied full encirclement split sleeve of appropriate design (b)(4) ***Notes – No assets in these areas.*** | | | X | |
| 416. | | • Apply reliable engineering method (b)(5) ***GOS 2575.1700, 8.1.1.4*** | X | | | |
| 417 | | Testing of Repairs Penlagement pine must be pressure tested to meet the requirements of a pay pineline. 710(a) | | | | |
| 417. | 480-93-180(1) / | Replacement pipe must be pressure tested to meet the requirements of a new pipeline .719(a) | | | | |

| | | SUBPART - M TRANSMISSION LINE FIELD REPAIR PROCEDURES | S | U | N/A | N/C |
|------|-------------|--|---|---|-----|-----|
| 418. | 192.605 (b) | (b) For lines of 6-inch diameter or larger and that operate at 20% of more of SMYS , the repair must be nondestructively tested in accordance with §192.241(c) ***Welding manual 2700.1200 Section 4.2 *** | X | | | |

| | DISTRIBUT | SUBPART - M TION SYSTEM PATROLLING & LEAKAGE SURVEY PROCEDURES | S | U | N/A | N/C |
|------|-----------------|--|---|---|-----|-----|
| 419. | | Frequency of patrolling mains must be determined by the severity of the conditions which could cause failure or leakage (i.e., consider cast iron, weather conditions, known slip areas, etc.) .721(a) ***GOS 2575.3100, 4.1*** | X | | | |
| 420. | | Patrolling surveys are required in business districts at intervals not exceeding 4½ months, but at least four times each calendar year .721 (b)(1) ***GOS 2575.3100, 4.2.1*** | X | | | |
| 421. | 480-93-180(1) / | Patrolling surveys are required outside business districts at intervals not exceeding 7½ months, but at least twice each calendar year .721 (b)(2) ***GOS 2575.3100, 4.2.2*** | X | | | |
| 422. | 192.605 (b) | Periodic leak surveys determined by the nature of the operations and conditions723 (a)& (b) ***GOS 2565.1100, 3.1*** | X | | | |
| 423. | | In business districts as specified, 1/yr (15 months) .723(b)(1) ***GOS 2565.1100, TABLE 4-1*** | X | | | |
| 424. | | Outside of business districts as specified, once every 5 calendar years/63 mos.; for unprotected lines subject to .465(e) where electrical surveys are impractical, once every 3 years/39 mos723 (b)(2) ***GOS 2565.1100, TABLE 4-1*** | X | | | |

| | TE | SUBPART - M ST REQUIREMENTS FOR REINSTATING SERVICE LINES | S | U | N/A | N/C |
|------|-----------------|--|---|---|-----|-----|
| 425. | 480-93-180(1) / | Except for .725(b), disconnected service lines must be tested the same as a new service line725(a) ***GOS 2525.3300, 8.13.1*** | X | | | |
| 426. | 192.605 (b) | Service lines that are temporarily disconnected must be tested from the point of disconnection, the same as a new service line, before reconnect. See code for exception to this725(b) ***GOS 2525.3300, 8.13.2*** | Х | | | |

| Comments: | | |
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| | SUBPART - M ABANDONMENT or DEACTIVATION of FACILITIES PROCEDURES | S | U | N/A | N/C |
|------|--|---|---|-----|-----|
| 427. | Operator must disconnect both ends, purge, and seal each end before abandonment or a period of deactivation where the pipeline is not being maintained. Offshore abandoned pipelines must be filled with water or an inert material, with the ends sealed .727(b) ***GOS 2525.3600, 3.1*** | X | | | |
| 428. | Except for service lines, each inactive pipeline that is not being maintained under Part 192 must be disconnected from all gas sources/supplies, purged, and sealed at each end727 (c) | X | | | |

| | | ***GOS 2525.2100, 3.5*** | | | |
|------|-----------------|--|---|--|---|
| 429. | | Whenever service to a customer is discontinued, do the procedures indicate one of the | | | |
| | 480-93-180(1) / | following: .727(d) | | | |
| 430. | 192.605 (b) | The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized by the operator .727(d) (1) ***GOS 2575.2200, 3.1*** | X | | |
| 431. | | A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly .727(d)(2) ***GOS 2575.2200, 3.3.1*** | | | |
| 432. | | The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed .727(d) (3) ***GOS 2575.2200, 3.3.2*** | X | | |
| 433. | | If air is used for purging, the operator shall ensure that a combustible mixture is not present after purging .727 (e) ***GOS 2525.3400, 3.2*** | X | | |
| 434. | | Abondoned vaults filled with suitable compacted materials .727(f) ***GOS 2525.3600, 6*** | X | | • |
| 435. | | Operator must file reports upon abandoning underwater facilities crossing navigable waterways, including offshore facilities727(g) ***GOS 2525.3600, 8.1*** | X | | |

| Comments: | | | |
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| .605(b) | | SUBPART - M | S | U | N/A | N/C |
|---------|------------|---|---|---|-----|-----|
| | | COMPRESSOR STATION PROCEDURES | | | | |
| | .605(b)(6) | Maintenance procedures, including provisions for isolating units or sections of pipe and for purging before returning to service | | | X | |
| | .605(b)(7) | Starting, operating, and shutdown procedures for gas compressor units ***GOS 2525.3000, 5*** | | | X | |
| | .731 | Inspection and testing procedures for remote control shutdowns and pressure relieving devices (1 per yr/15 months), prompt repair or replacement ***GOS 2575.1000, 7.1*** | | | X | |
| | .735 | (a) Storage of excess flammable or combustible materials at a safe distance from the compressor Buildings ***GOS 2525.3000, 6.6*** | | | X | |
| | ***GOS 252 | (b) Tank must be protected according to NFPA #30 ; Amdt 192-103 pub. 06/09/06 eff. 07/10/06. 25.3000 , 6.7 *** | | | X | |
| | .736 | Compressor buildings in a compressor station must have fixed gas detection and alarm systems (must be performance tested), unless: | | | X | |
| | | • 50% of the upright side areas are permanently open, or | | | X | |
| | | It is an unattended field compressor station of 1000 hp or less | | | | |
| | | | | | X | |
| | *****Notes | - No intrastate Compressor Stations**** | | | | |

| | PRES | SUBPART - M SURE LIMITING and REGULATING STATION PROCEDURES | S | U | N/A | N/C |
|--------------|--------------------------------|--|---|---|-----|-----|
| 436. | 490.02.190(1)/ | Inspection and testing procedures for pressure limiting stations, relief devices, pressure regulating stations and equipment (1 per yr/15 months) .739(a) ***GOS 2575.1000, 7.1*** | X | | | |
| 437. 438. | 480-93-180(1) / 192.605 (b) | In good mechanical condition .739(a) (1) ***GOS 2575.1000, 3.1.1*** | X | | | |
| 438. | | Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed .739(a)(2) ***GOS 2575.1000, 3.1.2*** | X | | | |

| 439. | | | to control or relieve at correct pre ***GOS 2575.1000, 3.1.3*** | essures consistent with .201(a), except for .739(b)739(a) | X | | |
|------|--------------------------------|--|--|--|---|--|--|
| 440. | | | Properly installed and protected from dirt, liquids, other conditions that may prevent proper oper739(a)(4) ***GOS 2575.1000, 3.1.4*** | | | | |
| 441. | | For steel lines if MAOP is determined per .619(c) and the MAOP is 60 psi gage or more739(b) | | | | | |
| 442. | | | If MAOP produces hoop stress that | Then the pressure limit is: | | | |
| | 480-93-180(1) / 192.605 (b) | | Is greater than 72 percent of SMYS | MAOP plus 4 percent | X | | |
| | | | Is unknown as a percent of SMYS | A pressure that will prevent unsafe operation of the pipeline considering its operating and maintenance history and MAOP | Α | | |
| | | : | ***2525.2900, 6.4.3, TABLE 6-1 | *** | | | |
| 443. | | | ssure limiting and regulating station GOS 2525.3900, 3*** | ons: Telemetering or recording gages 192.741(a) thru (c) | X | | |
| 444. | 480-93-180(1) / 192.605 (b) | Testing of Relief Devices - Procedures for ensuring, either by testing or a review of calculations at intervals not exceeding 15 months, but at least once each calculations at intervals not exceeding 15 months. | | | | | |

| Comments: |
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| | | SUBPART - M VALVE AND VAULT MAINTENANCE PROCEDURES | S | U | N/A | N/C |
|------|--------------------------------|---|---|---|-----|-----|
| 445. | 480-93-180(1) / 192.605 (b) | Written valve maintenance program detailing the valve selection process, inspection, maintenance, and operating procedures. The written program must detail which valves will be maintained under 49 CFR § 192.745, 49 CFR § 192.747, and 480-93-100. 480-93-100(1) ***GOS 2425.2400*** | X | | | |
| | | Transmission Valves | | | | |
| 446. | 480-93-180(1) / | Inspect and partially operate each transmission valve that might be required during an emergency (1 per yr/15 months) .745(a) ***GOS 2575.1200, 3.1, TABLE 4-1*** | X | | | |
| 447. | 192.605 (b) | Prompt remedial action required, or designate alternative valve .745(b) ***GOS 2575.1200, 5.2*** | X | | | |
| | | Distribution Valves | | | | |
| 448. | 480-93-180(1) / 192.605 (b) | Check and service each valve that may be necessary for the safe operation of a distribution system (1 per yr/15 months) .747(a) ***GOS 2575.1200, 3.1, TABLE 4-1*** | X | | | |
| 449. | | Prompt remedial action required, or designate alternative valve .747(b) ***GOS 2575.1200, 5.2*** | X | | | |
| | | Service Valves | S | U | N/A | N/C |
| 450. | 480-93-180(1)/ | Written service valve installation and maintenance program detailing the valve selection process, inspection, maintenance, and operating procedures. Does the program consider the criteria listed under 480-93-100(2)(a-f)? ***GOS 2575.2400, 3, 4*** | X | | | |
| 451. | 192.605 (b) | Service valve maintenance (1 per yr/15 months) 480-93-100(3) ***GOS 2575.1200, TABLE 4-1*** | X | | | |
| 452. | | Service valve installation and maintenance program fully implemented by 6/01/07? 480-93-100(6) ***Notes – PSE provided a copy of the VALVE INSTALLATION AND MAINTENANCE PROGRAM document*** | X | | | |

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

| | | Vaults | | | |
|------|--------------------------------|---|---|--|--|
| 453. | 480-93-180(1) / 192.605 (b) | Inspection of vaults greater than 200 cubic feet (1 per yr/15 months) .749 ***GOS 2575.1000, 7.1*** | X | | |

| | F | SUBPART - M PREVENTION of ACCIDENTAL IGNITION PROCEDURES | S | U | N/A | N/C |
|------|--------------------------------|---|---|---|-----|-----|
| 454. | 480-93-180(1) / 192.605 (b) | Reduce the hazard of fire or explosion by: (a) When a hazardous amount of gas is being vented into open air, each potential source of ignition must be removed from the area and a fire extinguisher must be provided. (b) Gas or electric welding or cutting may not be performed on pipe or on pipe components that contain a combustible mixture of gas and air in the area of work. (c) Post warning signs, where appropriate. 192.751 (a) thru (c) ***GOS 2575.2000, 3.2, 3.3, 3.6*** | X | | | |

| Comments: | | | |
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| | | SUBPART - M CAULKED BELL AND SPIGOT JOINTS PROCEDURES | S | U | N/A | N/C |
|--------------|--------------------------------|--|---|---|-----|-----|
| 455. 456. | 480-93-180(1) / 192.605 (b) | When subject to more than 25 psig, sealed with mechanical clamp, or sealed with material/device which does not reduce flexibility, permanently bonds, and seals and bonds as prescribed in §192.753(a)(2)(iii) .753(a) | | | X | |
| 457. | | When subject to 25 psig or less, joints, when exposed for any reason, must be sealed by means other than caulking .753(b) | | | X | |

| | | SUBPART - M PROTECTING CAST-IRON PIPELINE PROCEDURES | S | U | N/A | N/C |
|------|--------------------------------|--|---|---|-----|-----|
| 458. | | Operator has knowledge that the support for a segment of a buried cast-iron pipeline is disturbed must provide protection755 | | | | |
| 459. | 400.02.100/1>/ | Vibrations from heavy construction equipment, trains, trucks, buses or blasting? .755(a) | | | X | |
| 460. | 480-93-180(1) / 192.605 (b) | • Impact forces by vehicles? .755(b) | | | X | |
| 461. | 192.003 (0) | • Earth movement? .755(c) | | | X | |
| 462. | | Other foreseeable outside forces which might subject the segment of pipeline to a bending stress .755(d) | | | X | |
| 463. | | Provide permanent protection for the disturbed section as soon as feasible .755(e) | | | X | |

Comments:

#455-457. PSE does not use caulked bell and spigot joints.

#458-463. PSE does not have cast-iron pipe.

| | SU | UBPART N — QUALIFICATION of PIPELINE PERSONNEL | S | U | N/A | N/C |
|------|---------------------|--|---|---|-----|-----|
| Date | of last UTC staff O | Q plan review 2014 | | | | |
| 464. | 192.801 192.809 | Any revisions to plan since last review? Yes X No If yes, review revisions made. ***Notes – Margin areas highlighted in black were reviewed*** | X | | | |
| 465. | 480-93-180(1) | Have "New Construction" activities been identified and included in the operator's covered task list? 480-93-013 ***Notes – New construction tasks are included under covered tasks in OQ Plan 7600.1000 Section 4.6.1.2*** | X | | | |

| Comments: | | | |
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| | FILING RE | QUIREMENTS for DESIGN, SPECIFICATION, and CONSTRUCTION | S | U | N/A | N/C |
|------|---------------|--|---|---|-----|-----|
| 466. | 480-93-180(1) | Submittal of construction procedures, designs, and specifications used for each pipeline facility prior to operating the pipeline. All procedures must detail the acceptable types of materials, fittings, and components for the different types of facilities in the operator's system. 480-93-017(1) ***GOS 2425.1075, 3*** | X | | | |
| 467. | 480-93-180(1) | Construction plans not conforming with a gas company's existing and accepted construction procedures, designs, and specifications on file with the commission, submitted to the commission for review at least forty-five days prior to the initiation of construction activity. 480-93-017(2) ***GOS 2425.1075, 8.1*** | X | | | |

| | | MAPS, DRAWINGS, and RECORDS of GAS FACILITIES | S | U | N/A | N/C |
|------|---------------|--|---|---|-----|-----|
| 468. | 480-93-180(1) | Records updated no later then 6 months from completion of construction activity and made available to appropriate personnel. 480-93-018(3) ***GOS 2500.0500, 3.5*** | X | | | |

| | | PROXIMITY CONSIDERATIONS | S | U | N/A | N/C |
|------|---------------|---|---|---|-----|-----|
| 469. | 480-93-180(1) | Each operator must submit a written request and receive commission approval prior to: Operating any gas pipeline facility at greater than five hundred psig that is within five hundred feet of any of the following places: 480-93-20 (1)(a) A building that is in existence or under construction prior to the date authorization for construction is filed with the commission, and that is not owned and used by the petitioning operator in its gas operations; or : 480-93-20 (1)(a)(i) A high occupancy structure or area that is in existence or under construction prior to the date authorization for construction is filed with the commission; or : 480-93-20(1)(a)(ii) A public highway, as defined in RCW 81.80.010(3). 480-93-20 (1)(a)(iii) ***GOS 2525.1400, 6.3.1*** | Х | | | |
| 470. | 480-93-180(1) | Operating any gas pipeline facility at greater than two hundred fifty psig, up to and including five hundred psig, that is operated within one hundred feet of either of the following places: 480-93-20(1)(b) • A building that is in existence or under construction prior to the date authorization for construction is filed with the commission, and that is not owned and used by the | X | | | |

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

| petitioning operator in its gas operations; or: 480-93-20(1)(b)(i) | | |
|---|--|--|
| A high occupancy structure or area that is in existence or under construction prior to | | |
| the date authorization for construction is filed with the commission. 480-93- | | |
| 20(1)(b)(ii) | | |
| For proposed new construction, document evidence to demonstrate that it is not practical to | | |
| select an alternate route that will avoid areas or which demonstrates that the operator has | | |
| considered future development of the area and has designed their pipeline facilities accordingly. | | |
| 480-93-20(2) ***GOS 2525.1400, 6.3.2, 6.3.3*** | | |

| Comments: | | | |
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Attachment 1 Alternative Maximum Allowable Operating Pressure

For additional guidance refer to http://primis.phmsa.dot.gov/maop/faqs.htm
For FAQs refer to http://primis.phmsa.dot.gov/maop/faqs.htm

| 192.620 | Alternative MAOP Procedures and Verifications | S | U | N/A | N/C |
|---------|---|---|---|-----|-----|
| | The alternative MAOP is calculated by using different factors in the same formulas used for calculating MAOP in \$192.619. In determining the alternative design pressure under \$192.105 use a design factor determined in accordance with \$192.111(b), (c), or (d), or, if none of these apply in accordance with: | | | | |
| | Class Location Alternative Design Factor (F) 1 0.80 2 0.67 3 0.56 | | | | |
| .620(a) | (1) Establish alternative MAOP commensurate with class location – no class 4 | | | X | |
| | (2) MAOP cannot exceed the lowest of the following: | | | | |
| | (i) Design pressure of the weakest element | | | X | |
| | (ii) Test pressure divided by applicable factor | | | X | |
| .620(b) | (2) Pipeline constructed of steel pipe meeting additional requirements in §192.112. | | | | |
| | (3) SCADA system with remote monitoring and control | | | | |
| | (4) Additional construction requirements described in §192.328 | | | | |
| | (5) No mechanical couplings | | | | |
| | (6) No failures indicative of systemic material fault – if previously operated at lower MAOP | | | X | |
| | (7) 95% of girth welds have NDT | | | X | |
| .620(c) | (1) PHMSA notified 180 days before operating at alternative MAOP | | | X | |
| | (2) Senior Executive signatures and copy to PHMSA | | | X | |
| | (4) Strength test per §192.505 or certify previous strength test | | | X | |
| | (6) Construction tasks treated as covered tasks for Operator Qualification | | | X | |
| | (7) Records maintained for life of system | | | X | |

| 192.620 | Alternative MAOP Procedures and Verifications | | | N/A | N/C |
|---------|---|------|---|-----|-----|
| | (8) Class location change anomaly remediations | | | X | |
| .620(d) | (1) Threat matrix developed consistent with §192.917 | | | X | |
| | (2) Recalculate the potential impact circle per §192.903 and implement public education per §192.616 | | | X | |
| | (3) Responding to an emergency in an HCA | | | | |
| | (i) Identify HCAs using larger impact circle | | | X | |
| | (ii) Check personnel response times | | | X | |
| | (iii) Verify remote valve abilities | | | X | |
| | (iv) Verify line break valve control system | | | X | |
| | (4) Protect the right-of-way: | | | , | |
| | (i) ROW patrols 12 per year not to exceed 45 days | | | X | |
| | (ii) Plan to identify and mitigate unstable soil | | | X | |
| | (iii) Replace loss of cover if needed | | | X | |
| | (iv) Use line-of-sight markers per §192.707 | | | X | |
| | (v) Review damage prevention program in light of national consensus practices | | | X | |
| | (vi) ROW management plan to protect against excavation activities | | | X | |
| | (5) Control Internal Corrosion: | | | | |
| | (i) Program to monitor gas constituents | | Τ | X | П |
| | (ii) Filter separators if needed | | | X | |
| | (iii) Gas Monitoring equipment used | | | X | |
| | (iv) Cleaning pigs, inhibitors, and sample accumulated liquids | | | | |
| .620(d) | (v) Limit CO2, H2S, and water in the gas stream | | | X | |
| | (vi) Quarterly program review based on monitoring results | | | X | |
| | (6) (i) Control interference that can impact external corrosion | | | X | |
| | (ii) Survey to address interference currents and remedial actions | | | X | |
| | (7) Confirm external corrosion control through indirect assessment | | | X | |
| | (i) Assess adequacy of CIS and perform DCVG or ACVG within 6 months | | | | |
| | (ii) Remediate damage with IR drop > 35% | | Τ | X | П |
| | (iii) Integrate internal inspection results with indirect assessment | | | X | |
| | (iv) Periodic assessments for HCAs | | | X | |
| | (A-C) Close interval surveys, test stations at ½ mile intervals, and integrate results | | | | |
| | (8) Cathodic Protection | | Τ | X | П |
| | (i) Complete remediations within 6 months of failed reading | | | | |
| | (ii) Confirm restoration by a close interval survey | | Τ | X | |
| | (iii) Cathodic protection system operational within 12 months of construction completio | n | | X | |
| | (9) Baseline assessment of integrity | | | X | |
| | (i)(A) Geometry tool run within 6 months of service | | | | |
| | (i)(B) High resolution MFL tool run within 3 years of service | | | X | |
| | (ii) Geometry and MFL tool 2 years prior to raising pressure for existing lines | | 1 | X | T |
| | (iii) If short portions cannot accommodate tools, use direct assessment per §192.925, 929 or pressure testing | 927, | | X | |
| | (10) Periodic integrity assessments | | 1 | X | |

| 192.620 | Alternative MAOP Procedures and Verifications | S | U | N/AN/C | |
|---------|--|---|---|----------|--|
| | (i) Frequency for assessments determined as if all segments covered by Subpart O | | | | |
| | (ii) Inspect using MFL tool or direct assessment per §192.925, 927, 929 or pressure testing. | | | X | |
| | (11) Repairs | | | X | |
| | (i)(A) Use of the most conservative calculation for anomaly remaining strength | | | <u> </u> | |
| | (B) Tool tolerances taken into consideration | | | X | |
| | (ii) Immediate repairs for: | | | X | |
| | (A) Dents meeting 309(b) criteria | | | | |
| | (B) Defects meeting immediate criteria in §192.933(d) | | | X | |
| | (C) Calculated failure pressure ratio less than 1.25 for .67 design factor | | | X | |
| | (D) Calculated failure pressure ratio less than 1.4 for .56 design factor | | | X | |
| | (iii) Repairs within 1 year for: | | | X | |
| | (A) Defects meeting 1 year criteria in 933(d) | | | | |
| | (B) Calculated failure pressure ratio less than 1.25 for .80 design factor | | | X | |
| | (C) Calculated failure pressure ratio less than 1.50 for .67 design factor | | | X | |
| | (D) Calculated failure pressure ratio less than 1.80 for .56 design factor | | | X | |
| | (iv) Evaluate defect growth rate for anomalies with > 1 year repair interval and set repair interval | | | X | |
| .620(e) | (1) Provide overpressure protection to a max of 104% MAOP | | | X | |
| | (2) Procedure for establishing and maintaining set points for SCADA | | | X | |

| Comments: 192.620-PSE does not use alternative MAOP. | | |
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| | | |

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

Recent PHMSA Advisory Bulletins (Last 2 years)

| <u>Number</u> | <u>Date</u> | <u>Subject</u> |
|---------------|-------------|---|
| ADB-2013-07 | July 12, 13 | Potential for Damage to Pipeline Facilities Caused by Flooding |
| ADB-2012-10 | Dec 5, 12 | Using Meaningful Metrics in Conducting Integrity Management Program Evaluations |
| ADB-2012-09 | Oct 11, 12 | Communication During Emergency Situations |
| ADB-2012-08 | Jul 31, 12 | Inspection and Protection of Pipeline Facilities After Railway Accidents |
| ADB-12-07 | Jun 11, 12 | Mechanical Fitting Failure Reports |
| ADB-12-06 | May 7, 12 | Verification of Records establishing MAOP and MOP |
| ADB-12-05 | Mar 23, 12 | Cast Iron Pipe (Supplementary Advisory Bulletin) |
| ADB -12-04 | Mar 21, 12 | Implementation of the National Registry of Pipeline and Liquefied Natural Gas Operators |
| ADB-12-03 | Mar 6, 12 | Notice to Operators of Driscopipe 8000 High Density Polyethylene Pipe of the Potential for Material Degradation |
| ADB-11-05 | Sep 1, 11 | Potential for Damage to Pipeline Facilities Caused by the Passage of Hurricanes |
| ADB-11-04 | Jul 27, 11 | Potential for damage to pipeline facilities caused by severe flooding. |

For more PHMSA Advisory Bulletins, go to http://phmsa.dot.gov/pipeline/regs/advisory-bulletin